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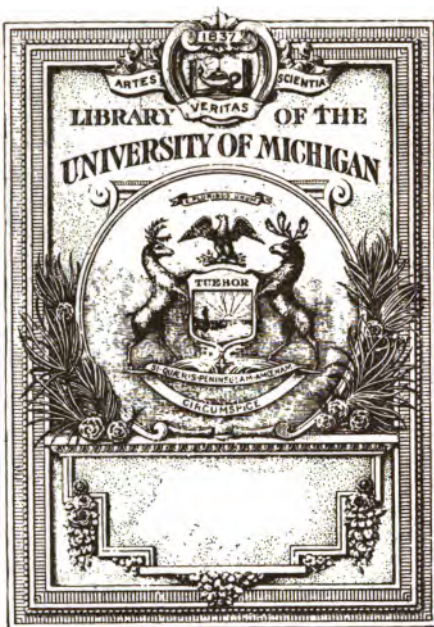
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ELECTRICAL BUREAU
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ANNUAL REPORT
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ANNUAL REPORT

OF THE

DIRECTOR OF THE

Department of Public Safety

AND OF THE

CHIEF OF THE

ELECTRICAL BUREAU

FOR THE

YEAR ENDING DECEMBER 31, 1910

ISSUED BY THE CITY OF PHILADELPHIA, 1911

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1911

ANNUAL REPORT
OF THE
DEPARTMENT OF PUBLIC SAFETY
FOR THE
YEAR ENDING DECEMBER 31, 1910

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OFFICERS
OF THE
DEPARTMENT OF PUBLIC SAFETY
DECEMBER 31, 1910

Director
HENRY CLAY.

Assistant Director,
JAMES B. SHEEHAN.

Secretary,
THOMAS B. BLYNN.

Chief Clerk,
WALTER S. HOPPER.

Chiefs of Bureaus,
POLICE—JOHN B. TAYLOR, Superintendent.
TIMOTHY O'LEARY, Assistant Superintendent.
FIRE—JAMES C. BAXTER, Jr., Chief Engineer.
ELECTRICAL—JAS. F. McLAUGHLIN.
CITY PROPERTY—ALFRED S. EISENHOWER.
BUILDING INSPECTION—EDWIN S. CLARK.
BOILER INSPECTION—JOHN M. LUKENS.
CORRECTION—WILLIAM A. PATTERSON.
ELEVATOR INSPECTION—FRANK FEENEY.

TWENTY-FOURTH ANNUAL REPORT
OF THE
DEPARTMENT OF PUBLIC SAFETY

HENRY CLAY, Director

Philadelphia, January, 1, 1911.

HON. JOHN E. REYBURN,
Mayor of the City of Philadelphia.

SIR:—In accordance with the Act of Assembly, I have the honor to herewith transmit a summary of the operations of the Department of Public Safety, together with a report of the Chiefs of the several Bureaus embraced therein, for the year ending December 31, 1910.

The year 1910 was important in achievements as shown by the reports of the various Bureau Chiefs.

The efficient work executed by the Bureaus of Police and Fire, the accomplishments in the improved system of public lighting by the Electrical Bureau, and the close attention to business by every Bureau in the Department has made Philadelphia the best-lighted and, in all probability, the best protected City from crime, danger and accident of any Municipality in the world.

Bureau of Police.

The report of Superintendent Taylor shows 82,017 arrests by the Bureau of Police, an increase of 1,183 over 1909. Of these arrests 80,322 were by the uniformed police, and 1,695 by the detective service. There were 38,456 arrests for intoxication and disorderly conduct, an

increase of 349. There were 4,242 robberies reported during the year, of which 3,230 were by sneak thieves, 766 forcible entry, 162 highway robbery, 12 badger game, 73 flim-flam. The total value of property reported stolen was \$294,446.16 and the amount of said property recovered was \$145,555.04. The total value of property of all kinds, lost and stolen, recovered during the year was \$654,472.16, of which \$152,416.14 was recovered by the detective service.

There were 11,809 houses reported temporarily vacant, of which number 39 were entered and robbed of goods valued at \$15,514.77. Of this amount \$4,597.08 was recovered, and 24 thieves were arrested, ten of whom were convicted, six acquitted and eight are yet to be tried.

Of those convicted two received a sentence of 10 years each, one 5 years and one 2 years and six months in the Eastern Penitentiary, two 9 months and one 3 months in the County Prison, and one was sent to the Huntington Reformatory.

There was no relaxation in the efforts to prevent unlawful gambling and to repress and prevent a public flaunting of vice, as will be shown by the following table of arrests during the last four years:

	1907.	1908.	1909.	1910.	Total.
Bawdy keepers.....	174	257	129	129	689
Bawdy inmates.....	431	308	127	111	977
Gambling keepers....	54	49	25	54	182
Gambling	1,133	896	667	567	3,063
Street walkers.....	893	1,063	1,033	791	3,780
Policy	40	52	31	40	163
Burglary	139	237	125	102	603
Pickpockets	208	367	215	218	1,008
Larceny	4,594	5,856	4,228	3,903	18,781

In connection with the arrests for what is known as the social vice it is only fair to explain that the prosecution

of these offenders has been accompanied by as little publicity as possible, sensational raids being carefully avoided, but the arrests being systematically and persistently made. This, together with the system of detainers requiring disorderly street walkers and other disorderly women to serve their full terms in the House of Correction, has gradually reduced the number of violators of the social law, and has had a beneficial effect in checking the soliciting on the highways.

I desire also to call your attention to the arrests for reported highway robbery. There were 162 highway robberies reported during the year, and 251 arrests for that offense, of which number 248 arrests were made by uniformed police on their beats; showing a remarkable activity and attention to duty when it is considered how large a territory some of the patrolmen are required to cover. The report on robberies of vacant houses showing only 39 entries and robberies out of 11,809 such buildings which were vacant on an average of about 35 to 40 days during the year is remarkable when it is considered that these houses are scattered over an area of 129½ square miles, and that the limited police force of this City has to patrol about 1,800 miles of streets and roads, and watch about 365,000 buildings, of which over 330,000 are dwellings. In this connection I desire to urge the absolute necessity for an increase of the police force by at least 500 men. Even then, compared with the City of New York, there would be a wide discrepancy as the following figures will show:

Total police force of New York.....	9,964
Total police force of Philadelphia, including detectives, janitrix, clerks, etc.....	3,612

The New York police force has about 255 detective sergeants, 180 of which are in Manhattan and 75 in

Brooklyn. Of the New York police force there is in Manhattan a force of 5,525, including 38 captains, 332 lieutenants, 295 sergeants, 4,738 patrolmen and 81 doormen.

In Brooklyn there are 2,808, including 25 captains, 173 lieutenants, 159 sergeants, 2,365 patrolmen and 65 doormen. There are also 19 inspectors and 25 surgeons on the New York force.

In Philadelphia there is a total force of 3,612, including 2 superintendents, 11 clerks, 5 fire marshals, 31 detectives, 16 captains, 41 lieutenants, 110 street sergeants, 131 house sergeants, 64 patrol drivers, 64 patrol officers, 2,610 patrolmen, 248 sub-patrolmen, 68 City Hall watchmen, 23 matrons, 59 janitors and 29 hostlers. But including all above in the police force for purpose of comparison with the police force of New York we have the following figures:

City.	Area Sq. Miles.	Force.	Men per Sq. Mile.
Manhattan	22	5,525	251
Brooklyn	77	2,808	36
Philadelphia	129½	3,612	28
Manhattan and Brooklyn	99	8,333	84
Manhattan, Brook- lyn, Bronx	139	9,090	65

Assistant Superintendent O'Leary's report of the operations of the detective service shows that the division handled 2,049 complaints and made 1,707 arrests, and 667 special investigations. There were 3,072 persons missing, of whom 2,709 were located. There were 501 horses reported stolen, of which 485 were recovered. There were 44 automobiles reported stolen, of which 42 were recovered. There were 17 motorcycles stolen and all were recovered. The Bureau of Identification identified 504 prisoners. The Division recovered stolen property valued

at \$44,560.20, a large increase over 1909, owing to the perfect system now operating between the Detective Division and pawnbrokers, who, by the aid of the new telephone system, promptly report all suspicious cases of attempt to pawn stolen goods.

There is a marked improvement in the discipline and appearance of the policemen in all branches of the service, due largely to physical exercises, drills and the requirement that all men shall be neat and well uniformed while on duty. The Physical Instructor's report shows an average attendance of 145 with a total of 11,174. The Drillmaster conducted 491 drills with a total attendance of 34,917.

Chief Surgeon Hubley R. Owen reports 1,439 examinations of police, 465 firemen, 31 guards for the House of Correction, and 36 private watchmen. He also made 4,112 visits to sick and injured patrolmen and firemen, an increase of 1,104 over 1909. He recommends the purchase of an ambulance for the exclusive use of the Department of Public Safety, which I strongly indorse.

Among the events during the year which called for active service by the police the most notable were the trolley car strike, which lasted from February 19th to April 17th, the automobile races on October 8th, the annual review and carnival of the police and firemen on October 1st, and the world's championship base ball games at Shibe Park. During the railroad strike the entire force was on continuous duty and was frequently called on to suppress disorder. While no riot was permitted to get beyond the control of the police, nor to last more than a short period of time, it was necessary to make 1,671 arrests. Too high praise cannot be accorded the police for their splendid discipline, and alert and

tireless attention to duty. Every attempt at riot was promptly met and quickly suppressed with a notable freedom from fatalities, and a still more remarkable freedom from destruction of property. The most flagrant offenders were promptly arrested and convicted, and the disorderly elements kept under complete control. Automobiles played a prominent part in conveying patrolmen to the various points of disorder and three automobile patrol wagons which were put in use demonstrated their value in the emergency, and have since given efficient service in their patrol districts.

It is estimated that over 500,000 spectators surrounded the course of the automobile races in Fairmount Park, but so well was the course policed that not a single accident was reported.

There were 55,081 communications received and answered during the year; an increase of 11,016.

Fire Marshal.

The report of Fire Marshal Lattimer shows that out of 3,778 actual fires during the year there were two arrests for arson. There were 238 inspections of places where high explosives were stored, 300 inspections for gasoline and benzine, 194 inspections of places where dynamite was stored, 206 theatre and moving picture inspections, 158 moving picture licenses issued, 138 operators licensed. The total receipts from licenses were \$16,475.

The expenditures of the Bureau of Police amounted to \$4,015,065.31, of which \$3,796,178.34 was for salaries.

Four patrolmen were killed in the line of duty during the year. The Roll of Honor consists of:

James O'Brien, Third District, died from burns re-

ceived while extinguishing a fire in a dwelling, February 4th.

William Weiss, Thirty-sixth District, died from injuries received by being struck by a chariot while rescuing two children at a circus on February 5th.

George Barnett, Twenty-first District, shot by a man he was arresting on suspicion of burglary, November 28th.

Morris Gelles, Eighth District, killed by a falling wall while aiding in the rescue of firemen at the Bodine street fire, December 22nd.

Bureau of Fire.

The report of Chief Baxter shows that there were 804 box and 3,224 local alarms, or 44 less than in 1909.

The fire losses were:

On buildings	\$697,345 00
On contents	1,881,974 00
Total losses	2,597,319 00

The insurance on the above was:

On buildings	\$21,968,825 00
On contents	19,522,526 00
Total insurance	41,491,351 00

There were 3,778 actual fires, 68 less than in 1909, but the losses were \$423,471 in excess of those of 1909. The high pressure system operated effectively at 30 fires.

There was an unusual fatality during the year. There were 34 deaths, an increase of 19, and 220 accidents, an increase of 25. Of the deaths 13 were caused by falling walls at the Bodine street fire, and one by being thrown from a hose cart while on the way to a fire. This Roll of Honor comprises the following:

D. Howard, hoseman, thrown from hose cart.

Robert Stewart, hoseman, killed at Bodine street fire.

Charles W. Edelman, hoseman, killed at Bodine street fire.

Gustav Wittig, foreman, killed at Bodine street fire.

Thomas Entwistle, assistant foreman, killed at Bodine street fire.

John F. Kalberger, assistant foreman, killed at Bodine street fire.

William S. McConnell, hoseman, killed at Bodine street fire.

Samuel W. Park, ladderman, killed at Bodine street fire.

William Bihlmire, ladderman, killed at Bodine street fire.

John Collins, ladderman, killed at Bodine street fire.

John F. Carroll, ladderman, killed at Bodine street fire.

George M. Matchinsky, ladderman, killed at Bodine street fire.

Thomas M. Pass, hoseman, killed at Bodine street fire.

Harry Bertolet, hoseman, killed at Bodine street fire.

The terrible catastrophe of December 21-22nd, at which the above heroes lost their lives, cast a pall upon the community which was quickly followed by a generous response to a call for aid for the Firemen's Pension Fund, which was threatened with serious depletion. Over \$100,000 has been raised as a trust fund invested by Drexel & Co. under the immediate care and attention of Mr. E. T. Stotesbury, of that firm, who himself generously contributed the splendid sum of \$26,000. This fund provides the pensions for the families of the deceased and subsequently goes to swell the capital of the Firemen's Pension Fund.

The efficiency of the Fire Bureau was increased during the year by the addition of a new water tower and a high pressure hose cart. Work on the high pressure extension in the mill district was also nearly completed and there is now a continuous system from Walnut street to Allegheny avenue between Fifteenth street and the Delaware river. A thoroughly equipped pumping station has been installed adjoining the old Fairhill reservoir at Sixth and Lehigh avenue, which basin has been put in complete condition with a storage capacity of 5,000,000 gallons of water. The reservoir is supplied from a 30-inch main

on Sixth street, running from Lardner's Point Pumping Station; and from a 36-inch main on Lehigh avenue, which is supplied from the Queen Lane Pumping Station, the combined capacity being not less than 250,000,000 gallons daily. This basin is in the heart of the mill district and gives a storage supply able to cope with any conflagration in the district. From previous records of fires it can be safely said that the refilling of the basin will not exceed 12 times per year, thus making the demands on the distribution mains very slight. The 5,000,000 gallons alone will permit the 11 units in the power station to operate nearly eight hours on a conflagration, delivering 12,500 gallons of water per minute without refilling the reservoir. Should a longer run have to be made, two 18-inch supply pipes, leading into the reservoir from the 30-inch and 36-inch mains on Sixth street and on Lehigh avenue, can pour water into the reservoir much faster than all the pumps can draw it out. The supply from the reservoir fills the high pressure system, there being ample head at the reservoir to fill and keep the pressure on all mains from Walnut street to Allegheny avenue, and at the same time this gravity supply will relay any defect that may arise in the George's Hill gravity supply, which fills the existing fire main supply in the downtown district. With this new pumping station at the Fairhill Reservoir any accident to the pumping station at Delaware avenue and Race street could be overcome as the entire high pressure system can be worked from either station if necessary.

On December 31st, the active force of the Bureau consisted of 968 men, of whom 956 were uniformed and 573 were hose and ladder men.

The apparatus comprised:

- 55 steam fire engines.
- 54 combination hose wagons and chemical engines.
- 3 two-wheel carts.
- 1 four-wheel cart.
- 2 hose wagons for 3½ inch hose.
- 14 Hayes hook and ladder trucks.
- 3 self-raising aerial trucks of 85 feet.
- 1 fire boat.
- 2 water towers.
- 4 Duval water towers for aerial trucks.
- 86 6-gallon extinguishers.
- 14 fuel wagons.
- 2 high-pressure nozzle wagons.

The reserve apparatus consisted of:

- 11 steam fire engines.
- 3 two-wheel carts.
- 2 four-wheel carts.
- 4 Hayes hook and ladder trucks.

The Chief renews his recommendation for additional companies in all of which I heartily concur, as follows:

Engine Companies:

- Broad and Ellsworth streets.
- Twelfth and Spruce streets.
- Fourth and Noble streets.
- Eleventh and Thompson streets.
- Fifty-fifth and Spruce streets.
- Seventh and Susquehanna avenue.
- Kensington avenue and Tioga street.
- Bustleton pike and Fulmer street.

Truck Companies:

- Broad and Race streets.
- Thirteenth and Spring Garden streets.
- Broad and Girard avenue.
- Seventeenth and Montgomery avenue.
- Third and Washington avenue.

The Firemen's Pension Fund paid out during the year \$101,190.45. The assets on December 31st were \$400,105.21.

The Bureau of Fire Escapes issued 201 certificates during the year.

Bureau of Correction.

The report of the Superintendent of the House of Correction shows a daily average of inmates of 949, as against 1,057 in 1909. Of this number 758 were males and 191 females. Four hundred and forty-one inmates were engaged in productive and 508 in non-productive labor. The total number of commitments during the year was 5,817, and the total number in the institution December 31, 1910, was 1,067. Of these commitments 2,286 were for the first offense, and 824 for the second offense. There were 100 for the tenth offense, 49 for the twentieth offense, 12 for the thirtieth offense, 13 for the fortieth, four for the fiftieth, one for the sixtieth, one for the seventieth, one each for the one hundred and fourth, one hundred and fifth and one hundred and sixth offense. There were 4,039 commitments for vagrancy, 1,092 inebriates, 277 for street walking and 398 at own request. There were 4,699 males and 1,118 females. Owing to the longer terms imposed on street walkers and disorderly characters there was a slight falling off of commitments for those offenses, the detainer which I placed against all such commitments requiring such inmates to serve the full term thereby keeping them off the streets for a longer period of time.

The financial report shows receipts of \$55,274.80, a decrease of \$517.65 from the total of 1909. The expenditures, however, were only \$186,325.49, or less than those of 1909 by \$5,948.09, showing an improvement of \$5,430.34. Of the receipts \$45,690.68 is credited to

the sale of gas, \$3,362 to the sale of coke, \$2,263.26 for coal tar, and \$3,629 for quarry stone.

The Superintendent calls attention to the failure of Councils to grant appropriations for extensions to the gas plant in the Tacony district, whereby it was impossible to keep pace with the increasing demands for service in that territory. He urges the necessity for a sufficient appropriation to meet the growing demands for gas extensions which he maintains would be an investment which would result in twofold returns.

In addition to actual receipts the Bureau should be credited with work performed for various City bureaus, which, owing to the rigid economy required during the year, would otherwise have been neglected. The value of such labor estimated at 50 cents per day per inmate, and material furnished the Bureau of Charities at the Municipal Hospital alone, was \$2,169.74, that at the Byberry Farm amounted to \$1,039.65, and at the Anti-toxin stable \$741.50, making a total for the Bureau of Charities of \$3,950.89. The Department of Wharves, Docks and Ferries was aided to the extent of \$3,158.94. In addition to the above, work was done on the highways and for charitable and church organizations which amounted in value to over \$5,500.

The report of the resident physician shows 19 deaths during the year, 18 males and one female. In view of the debilitated condition of the majority of the inmates when received this is a remarkable showing of the care and attention given the inmates, as is also the fact that of 25 females and eight cocaine fiends received in the hospital all were discharged in good condition. During the year, in addition to the regular inspections by the grand juries, the Institution was inspected by boards of other States and counties who highly commended the management. The

Directors of the Fayette County Poor Board stated that the Philadelphia House of Correction is "the best arranged, the best organized and the best conducted it has been our privilege to inspect," and Mr. J. C. Armstrong, of the Perez Syndicate, New York, said "in my visits at home and abroad I have never seen an institution of this character that excels this one in its systematic handling, and its universal cleanliness, nor where the policy of wise care for the comforts of its inmates seemed to be commensurate with good discipline."

Electrical Bureau.

The report of Chief McLaughlin shows unabated prosecution of the work necessary to maintain the high standard of excellence which marks the administration of the Electrical Bureau. During the year there was completed in the central part of the City the most comprehensive ornamental and satisfactory scheme of street lighting of any city in the world. No other city in the country can approach the completeness and effectiveness of the street lighting which has been introduced in this City, and which will be greatly extended during 1911. There are now in service on the streets of the City 13,285 electric arc lights maintained by the City, each diffusing a light equal in strength to 2,000 candles; these in addition to the numerous private incandescent lights on buildings and signs, which beautify and aid in the general illumination of the highways. All told, these lights give an illumination, approximately, of 34,506,000 candle power nightly in addition to the light furnished by the incandescent 10 candle power lamps on the electric signs.

In Berlin there are 1,055 electric arc lamps; Brussels has 210 (all extinguished at midnight); London has 400

open arc lamps of 1,200 candle power each; Paris has 1,851, of which 1,461 are lighted by private companies and the remainder by the City; Vienna has 1,155 arc lamps of 1,700 candle power each. In London the cost of maintenance of each arc light is \$126.50 per year. In Philadelphia the cost for 1911 will be \$94.63 per light per year, the total appropriation for 1911 amounting to \$1,238,923.15.

The City also enjoys free lighting as follows:

Eighty-six lamps by the Girard Estate.

One hundred and four arc lamps by the various companies under ordinance of Councils. Three lamps by the People's Traction Company and incandescent lighting in the police, patrol and fire houses, equalling altogether an outlay of \$75,200.

Added to this should be the sum of \$128,323.67 rentals from the City ducts, wires, etc., making a grand total of \$203,523.67.

Notwithstanding the increased number of lights the bid for lighting for 1911 is practically lower than the contract price for 1910, the reduction amounting to $5\frac{1}{2}$ per cent.

During the year there was an increase of 986 arc lamps, almost as many as the entire number in the cities of Berlin or Vienna, twice as many as the entire number in London, one half of the entire number in Paris and 50 per cent. more than London and Brussels combined.

The salary requirements of the Bureau were \$113,734.50 and the receipts \$128,323.67, showing a balance of \$14,589.17.

Electrical inspections were made in 14 new school houses by the request of the Board of Education; licenses were issued to 465 elevator operators who were required to take a systematic examination. The Chief of the

Bureau participated in the examination of 138 operators in moving picture shows, 158 moving picture establishments were inspected, new telephone boards were installed in the Electrical Bureau operating room, equipped for 57 line and 15 trunk circuits; a complete Keystone telephone service with pawn shops has been installed, and new sixty-watt motor generators were installed in the Fourth, Eighth, Ninth, Twelfth, Twenty-third, Twenty-fourth and Twenty-fifth District Station Houses.

Fines amounting to \$2,520.97 were paid by the Philadelphia Electric Company for failure of lights to burn.

There were 440 poles and $28\frac{1}{2}$ miles of overhead wire removed during the year. There are still maintained 78,690 poles of iron and wood and 19,033 miles of overhead wire. There were 27,798 telephone messages transmitted through the Central Switch Boards. The above does not include regular calls for trunk line connections, which approximated about 3,000,000 in number. Over the police boards there were transmitted 834,799 messages, an increase of 72,224 over 1909. The Police Board is operated continuously 365 days in the year, day and night, and the Chief urges that the mistakes have been so rare that they do not deserve mention.

Recommendations.

The Chief renews his recommendation for a complete rehabilitation of the fire alarm equipment in City Hall, there being no emergency equipment to take care of any possible emergency that may arise.

For the installation of a repair shop, which would cost only \$5,000.

Direct connection of all fire houses with the Electrical Bureau.

The installation of a new system of elevators in the City Hall.

The appointment of five inspectors of the 1862 fire signal boxes.

The appointment of five additional inspectors of wiring in moving picture shows and electric street signs.

The installation of at least 200 new, modern Electrical Bureau type patrol boxes.

The rewiring of City Hall, which is necessary to give satisfactory and increased service in the Hall.

In all of which I concur.

The Chief renews his recommendation of 1909 for the appropriation of \$500,000 for a new fire alarm plant as follows:

New fire alarm plant.....	\$325,000
Placing fire houses on independent lines.....	25,000
200 fire boxes:	25,000
200 remodeled boxes	5,250
200 patrol boxes	30,000
Wire cables, etc.....	14,750

of which I approve.

Bureau of City Property.

The report of Chief Eisenhower shows marked activity in the prosecution and completion of public works. During the year the following work was completed:

Erection of combination Police and Fire Houses at:

Tenth and Buttonwood streets.....	\$94,680 00
Belgrade and Clearfield streets.....	70,875 00
319-325 Race street	126,365 00

Erection of Police Stations at:

Willow Grove turnpike.....	59,340 00
1207 Pine street	55,953 00

Erection of Fire Houses:

Eighth and Jefferson streets	\$46,300 00
Germantown avenue and Bringham street..	31,350 00

Additions to Fire Houses:

Truck No. 5, 752-4 S. Sixteenth street.....	30,298 00
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Markets:

New cement pavement Second Street Market..	2,235 37
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Parks, Squares, etc.:

Improvement of park at Twenty-second and Lehigh avenue	24,500 00
Improvement of Ross Park	4,500 00
Improvement of Prospect Park.....	6,425 00
Improvement of Seventeenth and Passyunk avenue	1,375 00
Improvement of Eleventh and Tasker streets.	700 00
Improvement of playgrounds, Fifty-fifth and Christian streets	3,100 00
Erecting lavatory, Fairhill Square.....	8,000 00

The work under way included \$22,000 for gilding City Hall tower; \$249,760 for completion of City Hall; \$650 for Disston Park; \$17,850 for Stinger Park; \$19,000 for Connell Park; \$748,000 for League Island Park; \$26,350 for bath house at Montrose and Darien streets; \$28,050 for bath house, 732-4 Lombard street.

The following properties were purchased during the year:

Summer street, east of Fifty-seventh street, for bath house	\$4,800 00
Paschall avenue, for approach to Gray's Ferry bridge	15,000 00
752-4 S. Sixteenth street, for fire house....	10,000 00
Twelfth and Oak lane, for fire house.....	12,500 00

The receipts of the Bureau were \$68,359.36, of which \$33,304.08 were rentals, and \$23,710 from venders'

licenses. The total warrants drawn amounted to \$1,329,715.82. There was a balance merging of \$22,615.44 and a balance not merging, but carried forward to 1911, of \$831,999.39.

The bath houses were used by 1,245,321 men; 40,321 women; 4,444,444 boys, and 193,400 girls, a total of 5,923,486. There were 102,450 visitors to the City Hall. The Chief renews his recommendations for heated baths for winter use, and the construction of a Public Crematorium to take the place of the one recently destroyed. Which I approve.

Bureau of Building Inspection.

The falling off in building operations which affected the country generally, extended to Philadelphia, so that there was a falling off from the high record of 1909 of \$5,014,805, or 12 per cent. Notwithstanding this decrease, however, in the building operations, the year 1910 was the third highest in the history of the Bureau of Building Inspection. During the year there was a falling off of operations in New York City of 18 per cent.; in Brooklyn 41 per cent.; in San Francisco 19 per cent., and in St. Louis, 17 per cent. In this City 8,592 permits, covering 16,383 building improvements, were issued, with an estimated value of \$37,866,565. Of this number permits were issued for 9,143 dwellings to cost \$21,527,440, of which 8,034 were two story dwellings costing \$16,010,925, a decrease in the number of 700 buildings and a decrease in value of \$700,305 as compared with 1909. There were 1,061 three story buildings valued at \$5,239,265, an increase of 44 in number and \$266,765 in value. There were 45 four story dwellings costing \$275,400. All other buildings numbered 713 and were valued at \$9,314,225.

Among the buildings for which permits were issued were 57 manufactories valued at \$1,845,745; 33 tenement houses, \$1,156,500; 8 schools, \$1,114,390; 25 offices, \$598,025; 21 churches, \$596,625; 205 garages, \$494,185; 59 stores, \$388,225; 20 places of amusement, \$387,700; 137 stables, \$365,060; 29 warehouses, \$319,475; 2 apartment houses, \$312,000; 4 charitable institutions, \$307,500; 8 railroad stations, \$277,450; 11 Municipal buildings, \$252,185; 54 workshops, \$209,810; 6 power houses, \$122,800; 7 halls, \$115,900; 4 hospitals, \$96,200; 3 banks, \$77,750; 5 club houses, \$57,900; 1 bath house, \$15,000. The new buildings erected numbered 9,856, representing an investment of \$30,841,665. Of this number 60 were first class or fire proof; 15, second class; 9,669, third class, and 112, fourth class. Of the 60 first class buildings 28 were reinforced concrete, as were 23 first class additions to other buildings. Permits were also issued for 3,649 alterations, costing \$5,927,750, and 2,198 miscellaneous operations costing \$871,160. There were also erected 250 new fire escapes and 78 signs, for which permits were required.

There were 1,068 buildings inspected for fire escapes, of which 714 were ordered to comply with the law, in addition to 920 inspections for the Bureau of Tenement House Inspection. The number of complaints received and investigated was 1,219, of which number 940 were sustained and 279 unfounded.

The Inspectors made 65,470 visits to buildings in course of construction.

The Forty-sixth Ward showed the greatest growth during the year, with operations amounting to \$4,624,020, or a little more than 1-9 of the value of all building operations in the City, and consisted almost exclusively of dwelling operations. The Thirty-eighth Ward is second, and the Forty-second Ward third.

The six wards in the front rank in dwelling house construction are as follows:

Ward.	Dwellings.	Value.
Forty-sixth	1,288	\$3,953,550
Forty-second	927	2,651,810
Twenty-second	678	2,427,480
Thirty-eighth	1,110	2,274,009
Thirty-fourth	849	1,841,425
Fortieth	670	1,533,850

The receipts of the Bureau amounted to \$47,250.65 and the expenditures were \$59,670.99. This is a reduction in receipts from 1909 of \$2,700, and a saving in expenses of \$4,900.

Bureau of Elevator Inspection.

The report of Chief Feeney shows the need for, and benefit of, the Bureau. There were 505 permits issued for work on 563 elevators, the permits covering repairs to 174 freight and to 98 passenger elevators. Two hundred and fifty-two new freight and 39 new passenger elevators were installed, at a total cost of over \$400,000. This work required 1,800 inspections. There were also 13,000 periodical inspections, an increase of 1,335 over 1909. Certificates were issued for 2,944 elevators, an increase of 712 over 1909, and the greatest number ever issued in any year. There were 550 applicants for elevator operators' licenses, and 465 licenses were issued.

There were 38 elevators condemned and 25 accidents were reported on. These accidents resulted in 14 deaths and 16 injuries, of which 2 deaths and 2 injuries were on passenger elevators. One half of these accidents were caused by contributory negligence.

The following comparative table of elevator accidents shows a decided advantage in favor of Philadelphia:

	Killed.	Injured.	Total.
New York.....	56	58	114
Chicago	20	19	39
Philadelphia	14	16	30
San Francisco	12	21	33
Boston	13	16	29

In Boston there are only $\frac{1}{5}$ the number of elevators that there are in Philadelphia, and there was only one less person injured, while San Francisco, with less than one-half as many elevators as Philadelphia and where there is no official inspection, there were 3 more injuries than in Philadelphia.

The Chief estimates that there are about 2,000,000 passengers carried daily on the elevators in this City to safeguard whose lives it is not only important but highly necessary to have thorough and unbiased inspection of the delicate and high power machinery operating the cars, with authority to enforce the laws and, therefore, prevent as far as possible accidents and loss of life. Nor should the inspection be limited to the ability of the Bureau to pay its running expenses any more than should the conduct of any other Department charged with the health and safety of citizens.

In view of the marked tendency toward increase in the size, speed and loads carried by modern elevators the Chief urges the necessity for an efficient computer who shall pass upon the carrying capacity of each car, and shall compute safe loads that will enable the Bureau to hold elevator builders to the prescribed factors of safety.

At a salary of \$2,000 per year such employee, he urges, would more than earn his salary from the fees collected for the certificates he would issue. The Chief also renews his recommendation of an increase in the salaries of the Inspectors from \$1,000 to \$1,500 per annum.

Notwithstanding the Bureau has been in operation only

two years it is already practically self sustaining, the expenditures being \$33,997.25, and the receipts \$32,097.89.

Bureau of Boiler Inspection.

In his report Chief Lukens calls attention to the explosion of a boiler at the Midvale Steel Works caused by a cracked casting, and he, therefore, recommends the entire elimination of cast iron in boilers carrying high pressure. The tendency of boilers is now, he says, for higher pressure and large units of power, which necessarily calls for more rigid inspection, for metals of a higher character, and more rigid testing of materials in order to safely operate under new conditions.

He, therefore, renews his recommendations that the Bureau of Boiler Inspection be given full authority to inspect all boilers in operation in Philadelphia without regard to any inspection made by insurance companies. He urges that such inspection in conjunction with the inspections of the insurance companies would be a greater protection than is at present afforded, as the Bureau would then be able to keep all boilers up to a high standard.

There are 7,589 high pressure boilers in the City, of which number 7,099 are in active operation. There were 305 new boilers installed, and the inspectors condemned 41 boilers and ordered repairs to 429.

Out of 733 applicants for engineers' licenses only 353 obtained the required average, and 380 were rejected. Only six complaints were received of violations of the Engineer's License Law, of which three were without foundation. Two licenses were suspended for 60 days and one revoked; a good showing of general efficiency when it is considered that there are 6,022 engineers holding licenses.

With the exception of the smoke caused by locomotives

the City is in a very fair condition through the enforcement of the Smoke Ordinance. There were 1,580 inspections during the year, and where the law was being violated prosecutions were made through the City Solicitor, and in many cases the manufacturers installed expensive smoke consumers, which abated the nuisance. The railroad locomotives, however, are allowed, under the ordinance of Councils, five minutes for the emission of smoke, and considerable smoke was emitted, especially at the round house, where many locomotives are prepared for their runs. The Pennsylvania Railroad Company, however, has, at its own expense, installed two inspectors at the round houses and as a result there has been a vast improvement in conditions at those points.

The Bureau was again self sustaining, the earnings exceeding the appropriations for maintenance.

Employment Agency Division.

The report of David T. Smith, Deputy in charge of the Employment Agency Division, shows an increase of 11 licenses.

There are now 125 licenses, the receipts for which amounted to \$7,350, which leaves a net profit over the cost of maintenance of the Division of about \$4,000.

In closing this, my Fourth Annual Report as Director of the Department of Public Safety, I herewith express my appreciation of the faithful and loyal support of Assistant Director James B. Sheehan, that of Superintendent of Police John B. Taylor, and of the Assistant Superintendent Timothy O'Leary in every effort which has been put forth to obtain satisfactory results; of the cheerful, conscientious and creditable performance of duty

by my Secretary, Thomas B. Blynn, my Chief Clerk, Walter S. Hopper, the entire Office Staff and the various Bureau Chiefs. I desire to express to you my appreciation of your continued confidence, and to thank you for the many courtesies of which I have been the recipient at your hands.

Respectfully submitted,

HENRY CLAY,
Director.

ANNUAL REPORT
OF THE
ELECTRICAL BUREAU
FOR THE
YEAR ENDING DECEMBER 31, 1910

"THANK God every morning when you get up that you have something to do that day which must be done, whether you like it or not. Being forced to work, and forced to do your best, will breed in you temperance and self-control, diligence and strength of will, cheerfulness and contentment, and a hundred virtues which the idle never know."

—*Electro-Craft*, October, 1910.

ANNUAL REPORT
OF THE
ELECTRICAL BUREAU
FOR THE YEAR 1910

Philadelphia, February 24, 1911.

HENRY CLAY, Esq.,

Director, Department of Public Safety.

DEAR SIR:—I beg leave to submit to you my report covering the operations of this Bureau for the year 1910.

Appropriations.

The amount of one million seven hundred and forty-four thousand one hundred and thirty-two (1,744,132) dollars and eighty-eight (88) cents was appropriated and transferred to the Bureau during the year. One million seven hundred and eight thousand three hundred and forty-three (1,708,343) dollars and eighty-four (84) cents were expended; one million two hundred and fifty-one thousand four hundred and eighty-seven (1,251,487) dollars and seventy-one (71) cents were paid to the electric lighting companies for the illumination of the highways by electric arc lamps, and for the use of current in the various police, police patrol and fire stations and other municipal buildings; twenty-two thousand eight hundred and thirty-two (22,832) dollars and thirty-three

(33) cents were transferred to other Bureaus or Departments; eight thousand and seventy-one (8,071) dollars and seventy-eight (78) cents were merged, and four thousand eight hundred and eighty-four (4,884) dollars and ninety-three (93) cents were carried over to the books of 1911.

I desire to call your attention to the fact that one million two hundred and fifty-one thousand four hundred and eighty-seven (1,251,487) dollars and seventy-one (71) cents. is charged up to the lighting of the public highways of the City, and for the use of current in the various police, police patrol and fire stations and other municipal buildings; twenty-two thousand eight hundred and thirty-two (22,832) dollars and thirty-three (33) cents were transferred to other Bureaus or Departments; eight thousand and seventy-one (8,071) dollars and seventy-eight (78) cents were merged, and four thousand eight hundred and eighty-four (4,884) dollars and ninety-three (93) cents were carried over to the books of 1911, making a total of one million two hundred and eighty-seven thousand two hundred and seventy-six (1,287,276) dollars and seventy-five (75) cents, leaving a balance of four hundred and fifty-six thousand eight hundred and fifty-six (456,856) dollars and thirteen (13) cents that was actually appropriated for the specific use of the Bureau during the year.

Amount of Money Collected and Paid to the City Treasurer, During the Year by this Bureau.

This Bureau during the year collected and paid to the Receiver of Taxes to be deposited with the City Treasurer:

For taxes, license charges, etc., the sum of..	\$128,323 67
The salary requirements of the Bureau for	
1910 were	113,734 50
Leaving a balance over and above the salary	
requirements of	14,589 17

The financial statement of the Bureau as of December 31, 1910, follows, which shows that there was an unexpended balance including the amount transferred to other Bureaus or Departments during the year, namely, twenty-two thousand eight hundred and thirty-two (22,832) dollars and thirty-three (33) cents of thirty-five thousand seven hundred and eighty-nine (35,789) dollars and four (4) cents over and above the operating expenses of the Bureau during the year.

Electrical Bureau Statement—December 31, 1910.

Item.	Carried from 1909.	Appropri- ation, December 31, 1909.	Additional appropri- ations.	Loans.	Total ap- propriation.	Transferred to other Bureaus.	Expended.	Balance.
1.		\$118,880 00	\$688 33		\$119,468 33	\$5,728 83	\$113,734 50	
2.		25,000 00	12,000 00		37,000 00		36,968 61	\$1 39
2A	\$14 64				14 64		14 63	01
2B				\$25,000 00	25,000 00	4,682 20	20,317 80	
3.		800 00			800 00	400 00	400 00	
4.		2,000 00	350 00		2,350 00		2,199 54	150 46
4B				2,500 00	2,500 00		2,463 11	36 89
5.		500 00			500 00		500 00	
5B				500 00	500 00	19 27	480 66	07
6.		29,846 00			29,846 00	288 00	29,558 00	
7.		20,000 00	12,000 00		32,000 00	44 35	31,955 65	
7A	13 60				13 60		13 60	
7B				25,000 00	25,000 00	2,680 25	22,321 25	98 50
8.	4,252 75	12,500 00			16,752 75		16,684 43	68 32
8B				12,500 00	12,500 00		11,246 70	1,253 30
9.		1,213,716 25			1,213,716 25		1,207,499 02	6,217 23
9½		30,000 00			30,000 00		29,500 00	1,500 00
10.	58 96	20,000 00		12,000 00	32,058 96		32,052 48	6 48
10½		10,000 00			10,000 00		9,968 88	1 12

Electrical Bureau Statement—December 31, 1910.—Continued.

Item.	Carried from 1909.	Appropri- ation, December 31, 1909.	Additional appropri- ations.	Loans.	Total ap- propriation.	Transferred to other Bureaus.	Expended.	Balance.
10A.....	\$38 77				\$38 77		\$33 00	\$3 77
10B.....				\$25,000 00	25,000 00	\$2,472 94	22,444 44	82 62
11.....		\$500 00			500 00		500 00	
12.....		5,286 00			5,286 00		5,286 00	
13.....	942 38	1,000 00			1,942 38	1,567 68	374 70	
13 B.....				500 00	500 00	500 00		
14.....		5,000 00			5,000 00		4,998 15	6 85
14 B Reprs.....				2,500 00	2,500 00		2,043 13	456 87
14 B Ltg.....				5,000 00	5,000 00		2,551 40	2,448 60
14½ B.....				1,000 00	1,000 00	1,000 00		
15.....		500 00			500 00		423 57	76 43
15½.....	504 30				504 30			504 30
16.....		81,517 75			81,517 75	3,448 81	78,069 59	38 35
17.....	24,830 15				24,830 15		24,825 00	5 15
	\$30,653 55	\$1,577,046 00	\$24,933 33	\$111,500 00	\$1,744,132 88	\$22,832 33	\$1,708,343 84	\$12,956 71

Balance \$12,956 71

Transferred to other Bureaus 22,832 33

Leaving a total balance of \$95,789 04

The above balance of fourteen thousand five hundred and eighty-nine (14,589) dollars and seventeen (17) cents in the amount of money collected by this Bureau during the year, over and above the salary requirements of the Bureau for the year 1910, shows beyond question that this Bureau, as far as salary requirements are concerned, is absolutely self-sustaining, and it could be made more so with the passage of legislation, either by Act of Assembly or Councilmanic action, that will give this Bureau control over such matters as should come under its supervision and jurisdiction, and such as other large cities in the United States have.

One of the most important pieces of legislation that should be passed is the licensing of electrical contractors and making electrical inspections by this Bureau. A bill was prepared covering this matter thoroughly and presented at the last session of the House of Representatives at Harrisburg in 1909, but failed to pass. I sincerely trust that this bill will be again presented to the Legislature, now assembled, and passed. It will be very far-reaching in its effects and greatly inure to the benefit of every citizen of this municipality. Regulating the subject matter of the bill by "fees" for inspections, all the salary requirements of the inspectors appointed under this bill, if it should pass and be carried into effect, will not cost the City a single dollar, as licenses and inspection fees will pay their salaries.

Rehabilitation of the Fire Alarm Equipment.

I desire to call your attention again to the absolute necessity for the complete rehabilitation of the fire alarm plant in this building, plans and specifications of which have been drawn up by this Bureau. This is just as essential, in my judgment, as anything in connection with

the municipality; in fact, in order to get the efficient service that you justly demand of this Bureau it is absolutely essential, in order to provide this service, to have the most modern and efficient apparatus; this we have not, but must have. I will reiterate what I said in my previous reports in connection with this matter, and urge you to seriously consider the complete modernizing and rehabilitation of the most important part of this City's fire alarm system. When you consider that approximately seventy-five (75) per cent. of your police and fire alarm wires are overhead, it is a serious condition of affairs for a City like this to contemplate.

Recent storms have proved the fallacy of attempting to maintain police and fire alarm wires, which cover the most important service in connection with the City, "*Overhead.*"

Arrangements should be immediately made to provide the necessary appropriation to gradually, and as rapidly as possible, place this entire service underground. The great value of this is shown by your police and fire alarm service, covering the congested district of the City, taking in hotels, apartment houses, theatres and hospitals; they have all been placed underground, and during all sorts of weather give us absolutely no trouble whatever. The amount of money spent for maintenance, covering repairs, etc., in connection with the overhead police and fire alarm service referred to, if spent upon the installation of underground service, would, in a very short time, place your wires all underground.

I also desire to call your attention to the condition of the telephone installation in connection with the fire stations. This I also referred to in my last report, and I cannot resist the temptation to refer to it again in view of the importance of the situation in connection with this matter. There are as many as eight (8) fire stations on

one line. This is an extremely serious and dangerous condition of affairs, and it is physically impossible at times to call any particular station while the line is being used by any other station or company.

Each and every fire house should be connected upon a direct line with this Bureau, so that they could be reached at any and all times.

This means the installation of new cables in the various parts of the City, and arrangements should be made immediately to provide the necessary funds to complete the installation as it should be.

In my report to you covering the operations of the Bureau for the year 1909 I recommended that a loan of five hundred thousand (500,000) dollars be made for the purpose of completing a new fire alarm equipment; the placing of all your fire houses on separate lines to the Electrical Bureau; for new patrol boxes; new fire boxes, etc., the loan to be divided as follows:

New fire alarm plant.....	\$325,000
Placing fire houses on separate and independent lines	100,000
Two hundred fire boxes.....	25,000
Two hundred remodeled boxes.....	5,250
Two hundred patrol boxes.....	30,000
Wire, cable, etc., in connection with the in- stallation of the above new plant.....	14,750
Making a total of	<u>\$500,000</u>

I know of nothing more essential than the installation of this new plant, and I beg of you to seriously consider this question. I have referred to this matter in every report that I have made, and I only hope that we will not need an object lesson to prove to City Councils the absolute necessity of providing funds for this equipment.



**Raymond Walsh,
ELECTRICAL BUREAU APPRENTICE.**

10



Albert Mander Anthony Capriotti Howard Wright Howard Bainbridge Francis McKernan John Masterson
APPRENTICE BOYS CONNECTED WITH THE ELECTRICAL BUREAU.



Rewiring of City Hall.

I again desire to call your attention to the fact that notwithstanding repeated demands on the part of the undersigned, no appropriation has been made for the re-wiring and recabing of this building. I have referred to this in every report that I have made, showing the absolute necessity of providing funds for this purpose.

There are many rooms in this building where the circuits are overloaded, approximately twenty-five (25) to forty (40) per cent.; the result being extremely bad lighting, which can only be remedied by rewiring.

The wiring throughout the building, covering especially the telephone and signal services, is being very rapidly modernized by the installation in the floors of enameled steel conduits, several thousand feet having been installed during the years 1908, 1909 and 1910.

Free Electric Light Service to the City.

I desire to call your attention to the following statement, which is not only interesting but at the same time exceedingly instructive, in that it shows just what the City of Philadelphia receives through this Bureau absolutely "free," during the year:

Furnished "Free" to the City.

Under ordinances of Councils, by the various companies, 104 arc lamps, which, taken at the cost of lighting, as per schedule, at an average price of \$100 per lamp per annum	\$10,400 00
By the Girard Estate, 86 lamps at \$100 each per annum	8,600 00
By the People's Traction Company, 3 lamps at \$100 each per annum.....	300 00
Making a total of.....	\$19,300 00

Incandescent lighting furnished "free" to
 police stations, patrol houses and fire
 houses, as per ordinance of Councils..... \$55,900 00

Making a total of..... \$75,200 00

In addition to this the Electrical Bureau collected
 during the year 1910:

For license charges, police signal and tele-
 phone service, rental of ducts in City con-
 duits, rental of wires in City cables, com-
 mission on telephone calls, transmission
 of fire alarms and fire assignments, etc.... \$128,323 67

Making a grand total of..... \$203,523 67

You will perceive that this is an extremely interesting
 and at the same time instructive summary, showing clearly
 to the citizens of this great City just what they are re-
 ceiving in the way of gratuities from the public utilities
 companies through this Bureau annually.

I referred to this matter in my previous report and I
 believe it is interesting enough to republish, so that those
 interested may know the amount of "free" lighting service
 that the City obtains and the reason therefor.

Inspection of Public Schools.

The work in connection with the inspection of the
 various schools has been carried on by this Bureau
 seriously and effectively, and I believe is appreciated by
 the Board of Public Education.

Inspections have been made of the Public School
 Houses during the course of their construction, and final
 inspections, when the fixtures, telephones, bell and clock
 services were completed, were made by this Bureau during
 the year as follows:

James Madison School, Green and New Market streets.
 John Marshall School, Sellers and Franklin streets.

Hamilton School, Fifty-seventh and Spruce streets.
 James Wilson School, Twelfth and Wharton streets.
 William H. Hunter School, Mascher and Dauphin streets.
 Henry Burks School's additional wing, Third and Christian streets.
 Thomas Durham School, Sixteenth and Lombard streets.
 William Brantly Hanna School, Fifty-eighth and Media streets.
 Anthony Wayne School, Twenty-eighth and Morris streets.
 Thomas May Peirce School, Twenty-third and Cambria streets.
 John Barry School, Fifty-ninth and Race streets.
 Grover Cleveland School, Nineteenth and Butler streets.
 William Cramp School, Howard and Ontario streets.

In addition to the above an inspection was made by this Bureau of the exhaust fan motors in the Girls' High School, Seventeenth and Spring Garden streets.

City Hall Elevators.

I desire to call your attention to the condition of the elevators in this building, and I have no hesitancy in stating that the physical condition of them is positively a disgrace to the City of Philadelphia. It is a case of constantly patching and making repairs to them. We are doing our best in every way possible to keep them in a condition of safety so that no accidents may occur. In view of the small appropriation made to maintain these elevators it is marvelous that no accidents have occurred.

In view of the fact that these elevators were gradually installed from a period prior to the year 1890 up until 1894, with the exception of the group of four in the northwest corner of the building, which were only recently installed, and they are now carrying on an average of approximately 35,000 passengers daily, and have been in constant operation from twenty to twenty-five years, "they do not owe the City a dollar," and it is time they were replaced with modern and up-to-date apparatus.

I cannot urge too earnestly the installation of new elevators in this building, and the sooner it is done the better.

There are nineteen (19) passenger, one (1) freight, two (2) prisoner and one (1) tower elevator, making a total of twenty-three (23) elevators in this building.

I earnestly hope that you will urge Councils to provide money enough for the installation of a complete set of new and up-to-date elevators.

ELECTRICAL BUREAU.

Rules and Regulations Governing the Operation of City Hall Elevators.

1. Elevator starters and operators must report for duty promptly at the time assigned to them.
2. The operators must present a neat and clean appearance while on duty.
3. Operators are at all times expected to be polite and courteous to the public.
4. Operators must politely request all passengers to face the door on entering, and ask them to call out the floors at which they want to alight.
5. Under no circumstances will an operator using intoxicating liquors be permitted to operate an elevator. If found under the influence of liquor, he will be summarily dismissed from the service.
6. Signals must be answered promptly, and the annunciator board kept clear, so that when calls are made the operator will know from what floor the person is calling.
7. Under no circumstances must an operator leave his car unless excused.

8. Unnecessary conversation with passengers and starters is positively prohibited.

9. Under no circumstances will smoking be permitted while on duty.

10. Reading of papers or books during the hours of duty will not be permitted in any of the cars.

11. Elevator starters must take their positions in front of the cars, and pay strict attention to the starting of same.

12. Lounging about the corners or holding unnecessary conversation with anyone will not be permitted.

13. Starters when loading and starting the cars must call out the number of each car.

14. Operators must not start the cars, unless upon orders from the starter.

15. Operators on arriving at the first floor must keep their doors partly closed until the starter calls out their number.

16. Elevator starters must see that the cars are kept moving, and at no time shall all the elevators be at one floor.

17. A strict compliance with the above rules will be insisted upon and any infraction of same will be cause for suspension

J. F. McLAUGHLIN,

Chief of Electrical Bureau.

Approved:

HENRY CLAY,

Director of Public Safety.

Apprentices.

For the year 1910 provision was made in the appropriation by City Councils for the appointment of ten (10) apprentices in this Bureau. These young men have been appointed, most of them being graduates from the Manual Training Schools of this City.

The permanent retention of an apprentice force in this Bureau will enable us in the very near future to build up a strong technical force that will prove beyond question of great value to the City in connection with the work of this Bureau.

The young men are put through a regular course of training covering each and every branch of the service. Many of them are now performing excellent service, and the intention is, after they have served from two to three years, to have a "promotion" examination, thereby insuring true Civil Service among our own employees.

These young men receive \$360 per year during the course of instruction; one of them, Albert Mander, has been doing such splendid work—in fact, has developed into a skilled wireman that a recommendation was made by the undersigned to you to promote this young man, which was done; he now receives \$2.50 per day and is performing the services of a skilled wireman.

Market Street Subway.

I again desire to call your attention to the Market Street Subway, which I referred to in my last report, regarding the installation of an "emergency service for lighting" to provide for any contingency that may arise. This is a matter that should be taken up seriously and without delay.

*The Erection and Maintenance of Electric Signs Over
Sidewalks and Highways of the City.*

Under the ordinance of Councils approved April 12, 1909, which provides for the erection and maintenance of electric signs over the highways of the City of Philadelphia, the Chief of this Bureau was authorized to issue permits for the erection of the same. Since the passage of this ordinance this Bureau has issued one thousand six hundred and ninety-nine (1,699) permits for the erection of electric signs of various designs throughout the City, the illumination of the signs referred to being made through the installation of thousands of electric lamps of various voltages and candle power.

The proper and substantial construction and erection of these signs is a matter of great importance to the safety and convenience of all citizens. This Bureau has made a thorough inspection of all the electrical signs erected, and where the design, the construction, or manner of erection of the signs referred to did not meet with the requirements of the Bureau, the permit for the erection of the same was withheld until such time as the applicant complied with the rules and regulations of the Bureau governing the erection of electric signs, the artistic construction of the signs and the safety of the general public being at all times kept in view and insisted upon in a most rigid manner before the issuing of the necessary permits would be considered.

In view of the fact that there are so many of these signs constantly being erected and the absolute necessity for rigidly inspecting the same, it is absolutely essential that we should have a number of inspectors to carry on this work. Every sign should be thoroughly inspected and reported upon before the current is turned on; this, unfortunately, at the present time, is not the case, for the reason that we have not men enough to cover the territory.

ELECTRICAL BUREAU.

DEPARTMENT OF PUBLIC SAFETY.

HENRY CLAY,

Director

J. F. McLAUGHLIN,

*Chief of Bureau.*Rules and Regulations Governing the Construction and
Erection of Electric Signs.

ARTICLE I.

Permits.

Applications for the erection of electric signs must be made to and filed with the Chief of the Electrical Bureau. Plans covering the details of construction, method of attachment, the number of lamps and the location must accompany the application.

ARTICLE II.

Construction.

All signs must be made of sheet metal not less than No. 26 gauge, either galvanized, enameled or treated with at least three coats of anti-corrosive paint or compound, or of other approved non-combustible material. No part of the sign shall be colored with material that will wash off or become streaky or disfigured by the action of the weather. This clause does not preclude the use of wood in those parts of the sign which do not contain wiring or sockets. Box letters or signs must be provided with drainage holes of a size equivalent of one-quarter inch hole for each square foot of surface.

The sign must be supported on a metal frame and secured to the building in a strong and substantial manner, and must be sufficiently rigid to withstand wind strains.

Signs projecting from the building or side walls must be supported on iron brackets or from mast arms and be securely stayed. Top lifts should be fastened to the wall at least as high above the sign as the sign extends from the wall. Proper side guys should be installed.

Any sign now located shall be removed when unsafe or when ordered to be removed by the Chief of the Electrical Bureau.

Ladders when required must be made of iron, firmly secured to the framework of the sign.

ARTICLE III.

Wiring.

All wire must be double braided, rubber covered, and placed either inside the letters or in approved metal conduit, and the material and method of installation must be in accordance with the usual requirements.

Connections from signs to mains must be in approved conduit. The current-carrying parts of sockets and receptacles must be of copper.

Cutouts must be located in a convenient place and protected from the weather.

ARTICLE IV.

Switches and Flashers.

Time switches, flashers and similar appliances must be of an approved design and enclosed in a steel box, or in a cabinet lined with fire-resisting material. If a steel box is used, the minimum thickness of the steel must be .128 of an inch (No. 8 B. & S. gauge). If a wooden cabinet is used, it must be lined with marble or slate at least three-eighths ($\frac{3}{8}$) of an inch thick, or with steel not less than .128 of an inch thick. The box or cabinet must be so constructed

that when the switch operates, the blade shall clear the door by at least one (1) inch.

The flasher must be protected and controlled by a cut-out and switch located in the mains at the flasher, and each circuit wire from the flasher to the letters must be protected by a cutout. The circuit feeding the motor which operates the flasher must be tapped off the main ahead of the flasher cutout, and it must be protected by a cutout, and controlled by a knife switch or indicating snap switch located at the flasher.

ARTICLE V.

Connections.

Whenever possible, electric signs should be connected to separate mains extending to the service, and when the load exceeds 1,250 watts they must be so connected.

The maximum number of lamps which may be connected to a two-wire circuit or a two-wire branch of a three-wire circuit is as follows:

2 candle power sign lamps	52
4 candle power sign lamps	33
4 candle power standard lamps	28
8 candle power standard lamps	22
16 candle power standard lamps	12

ARTICLE VI.

Signs on Roofs.

The bottom of a sign erected on a roof shall not be nearer than six (6) inches above the roof.

ARTICLE VII.

Projecting Signs.

No sign or advertisement shall project beyond the curb line. No portion of any sign projecting beyond the

building line shall be less than nine (9) feet above the surface of the sidewalk, nor less than fifteen (15) feet if projecting from an alley wall. These restrictions shall not be considered as applying to temporary banners erected or suspended across streets securely fastened to buildings, with the consent of the owners of such buildings, and after the issuance of a permit by the Chief of the Electrical Bureau. The lowest part of these temporary banners shall not be less than twenty-five (25) feet above the surface of the street.

ARTICLE VIII.

Inspection.

An Inspector of the Electrical Bureau will examine the sign after completion, and current shall not be turned on until a "Certificate of Inspection" shall have been given by the Chief of the Electrical Bureau to the person or firm making the application for the permit.

J. F. McLAUGHLIN,
Chief of Electrical Bureau.

Licensing Operators of Passenger Elevators.

In pursuance of the ordinance of Councils approved April 15, 1908, in which the undersigned was designated as Chairman of the Examining Board for Licensing Operators of Passenger Elevators there were five hundred and forty-six (546) applicants, who were examined and passed and became eligible to operate passenger elevators, and four hundred and sixty-five (465) licenses were issued, on account of which four hundred and sixty-five (465) dollars were collected and paid into the City Treasury.

The above examinations, together with the one thousand nine hundred and ninety (1,990) previously re-

ported, brings the total number of licensed operators in the City up to two thousand four hundred and fifty-five (2,455), the total amount paid into the City Treasury on account of the same being two thousand four hundred and fifty-five (2,455) dollars.

The examinations of these operators have been conducted in a very thorough and practical manner by the Board of Examiners, which consisted of the Chief of the Electrical Bureau, the Chief of the Bureau of Building Inspection, and the Chief of the Bureau of Boiler Inspection, and the examinations referred to have taken considerable time and have imposed additional duties on the Board, they being compelled to give much overtime in connection with the qualifying of these men, and the rigid inspection to which they are subjected will beyond question redound to the welfare and safety of the public at large, who are constantly compelled to use elevators in all parts of the City in attending to their various business engagements.

Licensing Operators of Moving Picture Machines and Buildings.

The Chief of this Bureau is a member of the Examining Board for examining and qualifying operators of moving picture machines under the ordinance of Councils of February 25, 1908.

There have been examined and licenses issued to one hundred and thirty-five (135) applicants and one hundred and fifty-eight (158) establishments during the year; these, together with the four hundred and sixty-four (464) operators previously licensed, bring the total number of operators in the City of Philadelphia up to five hundred and ninety-nine (599), and the one hundred and fifty-eight establishments licensed during the year, together

with the two hundred and four (204) places previously licensed, bring the total number of places or establishments licensed since the passage of the ordinance up to three hundred and sixty-two (362) places. Up to the close of 1910 there has been paid into the City Treasury on this account the sum of thirty-nine thousand one hundred and ninety-five (39,195) dollars.

These licensed operators have been all thoroughly drilled as to their knowledge of the respective machines, and also as to their familiarity with the mechanism of the same, the questions propounded during the different examinations being constantly varied in order to prevent any collusion between new applicants for licenses and others who have successfully passed and been duly licensed.

ELECTRICAL BUREAU.

DEPARTMENT OF PUBLIC SAFETY.

HENRY CLAY,
Director.

J. F. McLAUGHLIN,
Chief of Bureau.

General Rules and Regulations Governing the Installation of Wiring, Lighting and Apparatus for Picture Show Parlors.

ARTICLE I.

Plans and specifications covering the details of the installation for electric wiring must be submitted to the Chief of the Electrical Bureau for approval.

ARTICLE II.

All wires must be run in approved conduits. No other method, under any circumstances, will be approved.

ARTICLE III.

House lighting must be controlled from the booth, entrance and stage (a remote controlled switch is preferred).

ARTICLE IV.

There must be two separate and distinct services, where practicable, feeding from separate street mains, one service to be of sufficient capacity to supply current for the entire equipment of the house, and the other service must be of at least sufficient capacity to supply current for all emergency lights.

ARTICLE V.

Emergency lights are exit lights, and all lights in entrances, lobbies, stairways, corridors and other portions of the house to which the public have access, and which are normally kept lighted during the performance, together with sufficient number of lights to light the house.

ARTICLE VI.

Exit lights and all emergency lights must not have more than one set of fuses between same and main distributing fuse panel.

ARTICLE VII.

Picture machines must be of an approved type, and placed in an enclosure or booth made of suitable fire-resisting material (detail drawing to be submitted for approval), thoroughly ventilated, and large enough for the operator to walk freely on either side of or back of the machine, at least eight (8) feet by eight (8) feet by eight (8) feet.

ARTICLE VIII.

All openings in the booth must be arranged so as to be entirely closed by doors or shutters constructed of the same fire-resisting material as the booth itself.

ARTICLE IX.

Doors must be arranged as to be held closed by spring hinges or equivalent approved devices.

ARTICLE X.

Shutters must be arranged so as to be readily closed, and when open only held by a light fuse link or with silk thread.

ARTICLE XI.

Machines must be operated by hand (motor driven will not be permitted).

ARTICLE XII.

Wiring for picture machines must have a capacity of not less than No. 6 B. & S. gauge, asbestos-covered wire.

ARTICLE XIII.

A switch controlling the current for the moving picture machine must be located within the booth enclosing the machine. All cutouts and switches must be located as nearly as possible to one point, preferably near the entrance to the building.

ARTICLE XIV.

Rheostats must be placed in the basement and mounted on non-combustible, non-absorptive insulating bases, raised to a height of at least twelve inches from the floor and two feet from the wall, and must be enclosed with a substantial metal guard having a mesh not larger than one square inch. This guard to be kept at least one inch from the outside frame of the rheostat.

ARTICLE XV.

On alternating current circuits the following apparatus is recommended for use: Fort Wayne Compensarc, Hallburg Economizer, General Electric Economy Arc, Powers Induction Terminal, Roentgen Controller, Zerveller Controller (latest type only), Mercury Arc Rectifier and Motor Generator Set.

ARTICLE XVI.

On direct current circuits the apparatus used in connection with the lamps should be, preferably, a motor generator set. If resistance is used, it should be of the grid type.

ARTICLE XVII.

All moving picture machines to be connected on 220 volts, and where motor generator sets are used the phase and voltage end of motor must conform with the general rules and regulations of the Philadelphia Electric Company (Article 15, page 44, of this company's rules).

ARTICLE XVIII.

Drop cords will not be permitted, and the orchestra lights or portable fixtures must be equipped with approved reinforced cord, at least No. 14 gauge.

ARTICLE XIX.

Red exit lights must be provided over each doorway leading to exit proper. Rear exits must have a light on the outside as well as the inside. The outside lamp to be clear glass.

ARTICLE XX.

Fan outlets must be installed on a circuit independent of the lights.

ARTICLE XXI.

Cartridge fuses, type A contact, or Edison plug fuses must be used, and all fuses above ten (10) amperes must be of cartridge type only, and under no circumstances must fuses be bridged by wire or other materials.

ARTICLE XXII.

Call bell, signal wiring, telephone wiring, etc., must be installed in the same manner as the electric light wiring.

ARTICLE XXIII.

An Inspector of the Electrical Bureau will examine the installation upon completion, and current shall not be turned on until a "Certificate of Approval" shall have been issued by the Chief of the Electrical Bureau.

J. F. McLAUGHLIN,
Chief, Electrical Bureau.

Bell Telephone Switchboards.

On the Bell Telephone Board in Room 612, City Hall, there was inaugurated during the year a new and original scheme for handling "emergency" calls coming from the various Bell subscribers throughout the City.

An arrangement was made whereby six special trunk circuits were set aside for nothing but incoming emergency calls. A red light is used for a signal on each of these trunk circuits in our Bell Board. There is a special number (Spruce 20) assigned to these trunk circuits, and this special number, together with the instructions how to use the same, was given great publicity both through the Bell Telephone Directory and through the daily newspapers.

The scheme was put into active operation on October 25, 1910, since which time it has undoubtedly proved its great usefulness.

In our Bell Board in Room 612, City Hall, there are now working 427 line and 100 trunk circuits, being an increase of 26 line circuits during the year.

Bell Telephone Police Board

On account of the great increase in business on our Bell Police Telephone Board in Room 629, City Hall, it was necessary to install an entirely new two-position Bell Board in place of the one-position board originally placed there.

This new board is of the very latest pattern. It consists of two positions, having 15 pairs of cords for each position, and is so arranged that one position can be used for sending out "general" messages, if necessary, while the other is being used for the regular calls.

The board is equipped for 100 line and 15 trunk circuits with an ultimate capacity of 200 line and 40 trunk circuits. Lamps are used for the signals on all line, trunk and cord circuits. It was installed by the Bell Telephone Company under the direct supervision of this Bureau. After the preliminary connections had been made the old Board was disconnected at 12 o'clock P. M. on August 13th, and the new board connected in its place.

With two positions and the increased number of cord circuits we are now enabled to put two operators on the board and to handle the business a great deal more satisfactorily in rush times, which are due to strikes, murders, etc., and other public disturbances.

There are now working in this board 57 line and 15 trunk circuits, being an increase of 2 line and 5 trunk circuits during the year.



NEW MUNICIPAL POLICE TELEPHONE SWITCHBOARD.



Keystone Telephone Switchboards.

In our Keystone Telephone Switchboard in Room 612, City Hall, there are now working 327 line and 40 trunk circuits. This is an increase of 11 line circuits during the year.

Keystone Telephone Police Board.

In our Keystone Police Telephone Switchboard in Room 629, City Hall, there are now working 61 line and 10 trunk circuits, an increase of 1 line circuit during the year.

Keystone Pawnbrokers' Board.

A most important acquisition to our Police Telephone room was the installation of the Keystone Pawnbrokers' Switchboard. To this board are connected individual circuits running to the offices of all pawnbrokers in the City, and also circuits to the offices of the officials of the Department of Public Safety, Bureau of Police, and Detective Department.

The board is a two-position board with a total of 120 line circuits and 5 special circuits. Lights are used for signals on all line, special and cord circuits. In each position there are 20 pairs of cords. The battery for this board is mounted in a cabinet in Room 629. It consists of 11 cells of 16 ampere hour capacity. It is charged directly from the Keystone Telephone Company's Race Exchange.

The terminal and cross connecting frame for the Pawnbrokers' Board is mounted on the wall in an offset in Room 629. It consists of two vertical strips with the necessary punching and fanning strips.

This board was installed by the Keystone Telephone Company, under the direct supervision of this Bureau.

The necessary negotiations for it were entered into the

latter part of 1909, and on January 31, 1910, it was thrown into service with one hundred and three (103) pawnbrokers connected thereto and five (5) special circuits to the officials of the Department of Public Safety, Bureau of Police, and Detective Department. Since that time there have been two (2) pawnbrokers' circuits connected and three (3) circuits disconnected, leaving a total of one hundred and two (102) pawnbrokers' circuits and five (5) special circuits now working in the board. When it was installed it was so located that it would not be possible under any circumstances to make any outside exchange connections therewith.

The great value of this equipment can be better appreciated when we consider the fact that there have been a large number of thieves captured solely by its aid.

A record of every call made on this board has been kept, and the total number of such calls from January 31, 1910, to and including December 31, 1910, amounted to approximately sixteen thousand five hundred (16,500).

This Pawnbroker Telephone System has been installed in this building without the cost of a dollar to the City, the pawnbrokers paying for the service.

Electrical Bureau Laboratory.

The work in the Electrical Bureau Laboratory during the year 1910 consisted, as it did in 1909, of making efficiency and life tests of both carbon and tungsten filament incandescent lamps, calibrating direct current voltmeters and ammeters, and making insulation, capacity, and conductivity tests on all cable purchased by the Bureau.

During the year we made tests on:

3,000 feet of 15 pair paper insulated cable.

5,000 feet of 10 pair paper insulated cable.

28,000 feet of 30 pair paper insulated cable.



NEW MUNICIPAL TELEPHONE SWITCHBOARD.
Connected to every Pawnbroker in the City, and directly connected to
the Police System.

50

- 55,000 feet of 25 pair paper insulated cable.
- 5,000 feet of 4 conductor rubber insulated cable.
- 10,000 feet of single conductor rubber insulated cable.
- 5,000 feet of 5 pair rubber insulated cable.
- 5,000 feet of flexible mast arm wire, rubber insulated.
- 25,000 feet of No. 14 gauge twisted pair wire, rubber insulated.
- 50,000 feet of No. 18 gauge twisted pair wire, rubber insulated.

This material was all of a very high quality, in accordance with the high standard adopted in the Electrical Bureau specifications.

Without the aid of our laboratory instruments it would have been impossible for us to have kept a check on this important part of the supplies purchased by this Bureau.

Motor Generator and Dynamotor Sets.

During the year we installed a sixty (60) watt dynamotor set and eighteen (18) cells of storage battery in the new Fourth Police District Station House on Race street below Fourth street, and a sixty (60) watt motor generator set, together with eighteen (18) cells of storage battery, in each of the following buildings:

- Eighth Police District Station House, Buttonwood street, west of Tenth street.
- Ninth Police District Station House, Twentieth and Buttonwood streets.
- Twelfth Police District Station House, Eighth street, below Jefferson street.
- Twenty-third Police District Station House, Nineteenth and Oxford streets.
- Twenty-fourth Police District Station House, Belgrade and Clearfield streets.
- Thirty-fifth Police District Station House, York road and Champlost street.

In each instance the Motor Generator set or the Dynamotor set, with the necessary equipment, was mounted in

accordance with the standard adopted by this Bureau. Each machine was placed on a substantial cement base in the battery room, right over it was mounted the slate panel board on brackets from the wall, and at the side on the wall the shelf containing the storage battery was located.

The standard slate panel board adopted for this purpose contains all the necessary apparatus for making the improvement complete, including retardation coil, lamp resistances, double pole fused switches, overload and underload circuit breakers, etc.

In these installations the wiring was all run in iron enameled conduits and all work was done in the best manner possible, so that the completed apparatus makes a complete, neat, durable and efficient acquisition to the Police Districts mentioned.

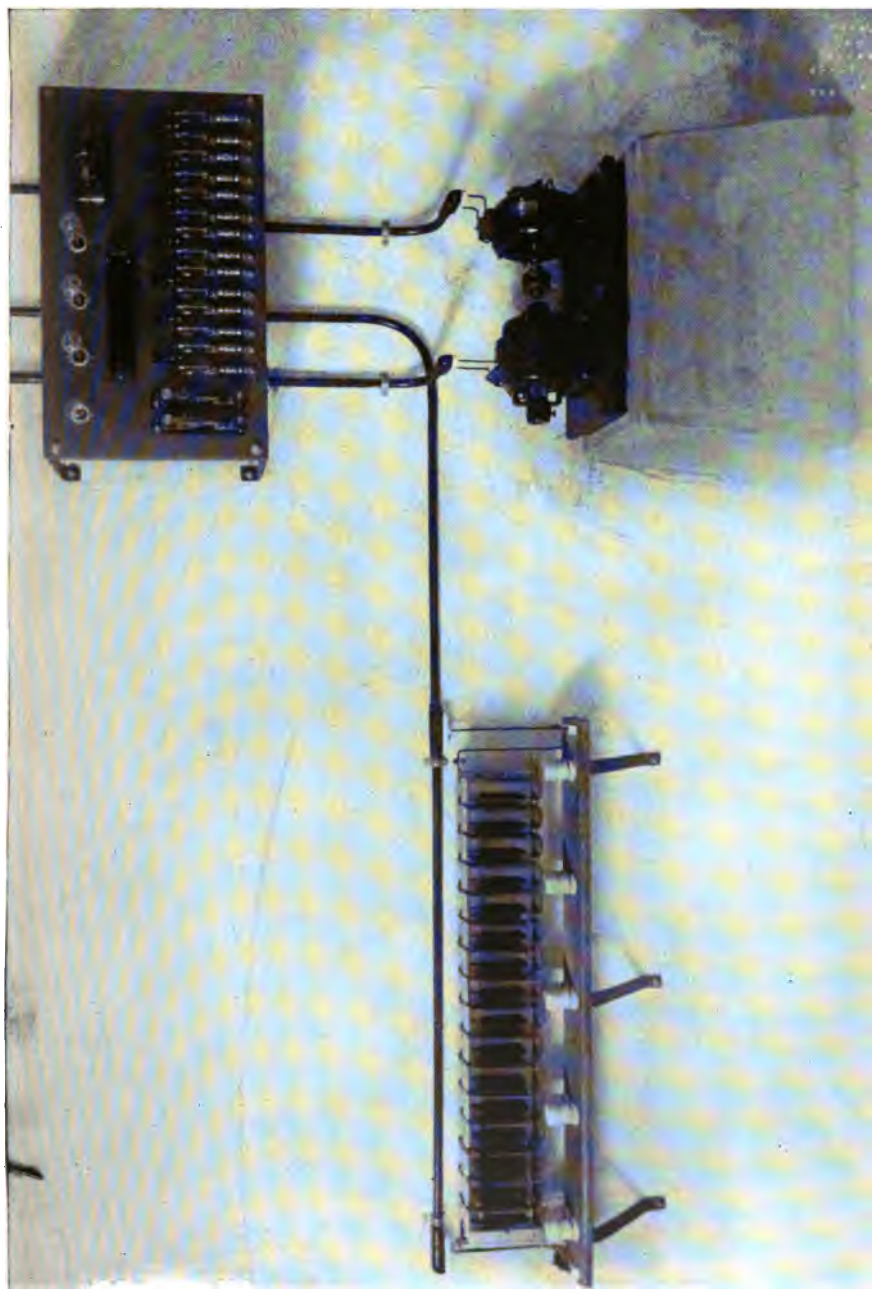
In the Police Districts referred to these machines have replaced fifty-eight (58) cells of Leclanche, and two hundred and eighty-six (286) cells of Gravity battery.

We have six (6) more of these motor generator sets on hand; the work of installing them is now being carried forward as rapidly as possible.

It is to be hoped that every police district in the City will be equipped with Motor Generator and Dynamotor sets by the latter part of this year, thus eliminating forever the old bluestone battery method that has been in vogue for years.

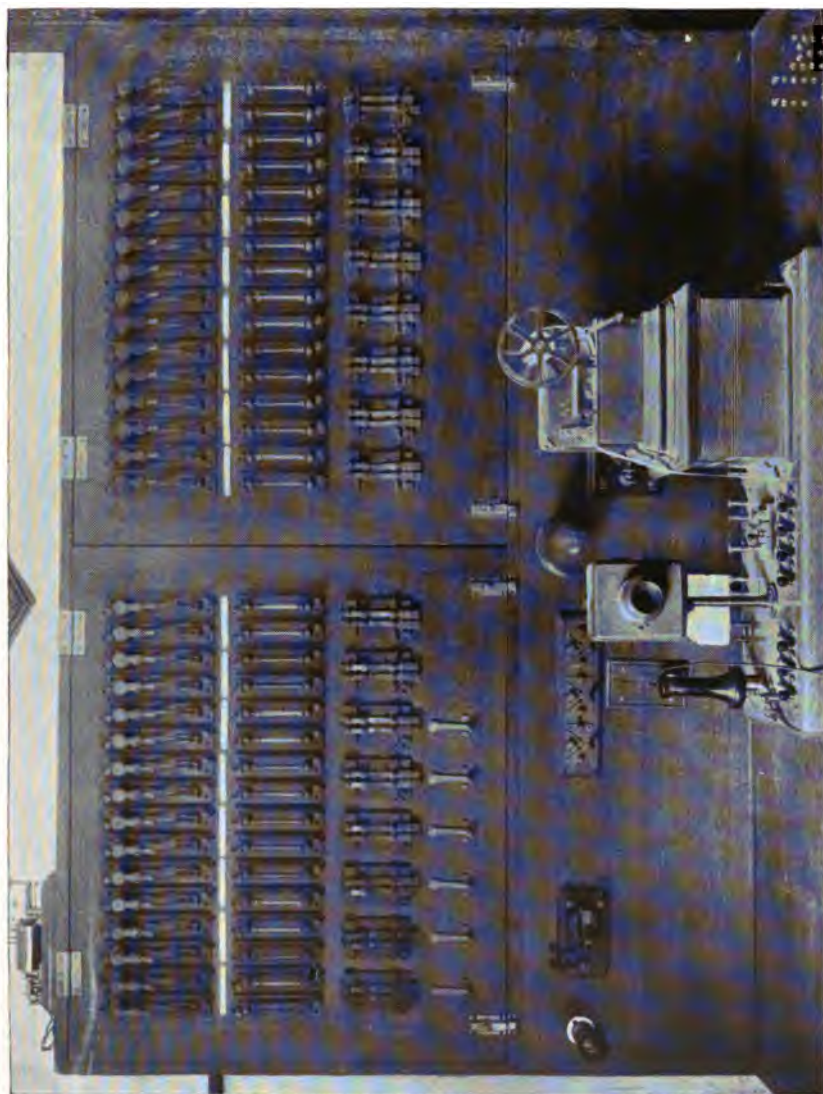
Shearing Registers and Central Office Sets.

During the year there were installed in the Nineteenth Police District Station House, Pine street above Twelfth street, and in the Twenty-first District Station House, Woodland avenue west of Thirty-second street, new Central Office Sets. These districts already had new Shearing Registers.



**MOTOR GENERATOR EQUIPMENT AT NINTH POLICE DISTRICT, WITH STORAGE BATTERY FLOATED ACROSS AS AN AUXILIARY.
New Method of Furnishing Current for Police Station Service.**

2



LINE TERMINAL, PROTECTOR BOARD AND POLICE PATROL EQUIPMENT, INCLUDING CENTRAL OFFICE SET AND SHEARING REGISTER AT THE NEW EIGHTH DISTRICT STATION HOUSE.



Both Shearing Registers and Central Office Sets were placed in each of the following Police Station Houses:

- Fourth Police District Station House, Race street, below Fourth street.
- Eighth Police District Station House, Buttonwood street, west of Tenth street.
- Ninth Police District Station House, Twentieth and Buttonwood streets.
- Twelfth Police District Station House, Eighth street, below Jefferson street.
- Twenty-third Police District Station House, Nineteenth and Oxford streets.
- Twenty-fourth Police District Station House, Belgrade and Clearfield streets.
- Thirty-fifth Police District Station House, York road and Champlost street.

These Central Office Sets consist of an oak finished telephone stand, with the necessary switches, transmitter, receiver, hook, and mounting for the Shearing Register placed thereon.

These Central Office Sets were constructed in accordance with the Electrical Bureau specifications and drawings and with the Shearing Registers make a most complete arrangement.

Fire Circuits Worked From City Hall Electric Lighting Current.

Throughout the year, whenever possible, we have worked twenty-three (23) of our fire circuits from current obtained from the Electric Lighting Plant in City Hall. Owing to the numerous grounds on the building lighting circuits it is becoming more and more hazardous for us to do this, consequently we are obliged to keep these fire circuits working from the storage battery installation a greater part of the time.

The electric lighting wiring in this building is very

old, and, as has been suggested before, should be entirely renewed as soon as possible, so that it will be free from all grounds. This would make it a great deal safer for use on fire circuits, as well as improving the conditions for the general lighting of the building.

Electrical Bureau Exhibit at the Electrical Exhibition.

At the Electrical Exhibition which was held in the First Regiment Armory, Broad and Callowhill streets, from February 24th to the 26th inclusive, this Bureau was represented by a very prominent exhibit.

We had there the very latest apparatus as developed and used by this Bureau in connection with the Fire Alarm and Police Patrol systems, including our new Central Station Telephone Stand and Set with the Shearing Register; our new Combination Fire Water Main Telephone and Fire Alarm Post; our new Patrol Boxes, new successive non-interfering fire box, Advance Signal Bell and large gong as used in fire houses; new Motor Generator and Storage Battery equipment for station houses alongside of a battery rack containing the old gravity batteries, as a comparison, together with various other electrical appliances.

Our booth was beautifully decorated with various colored electric lights. Over the center were two sets of crossed flags, the National and City colors, made up with the proper colored incandescent lamps; between each set of flags was a star outlined with red and white incandescent lamps, and under it the words "*Philadelphia Electrical Bureau*" in white incandescent lamps.

This Bureau's exhibit attracted a great deal of attention and was universally considered to be one of the most attractive and most interesting at the show.

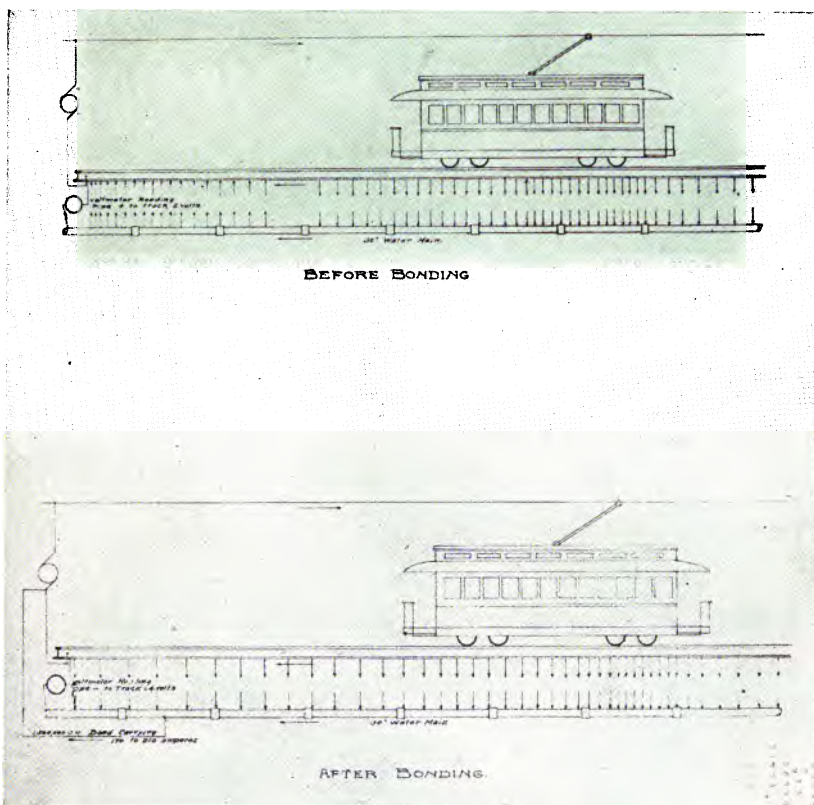
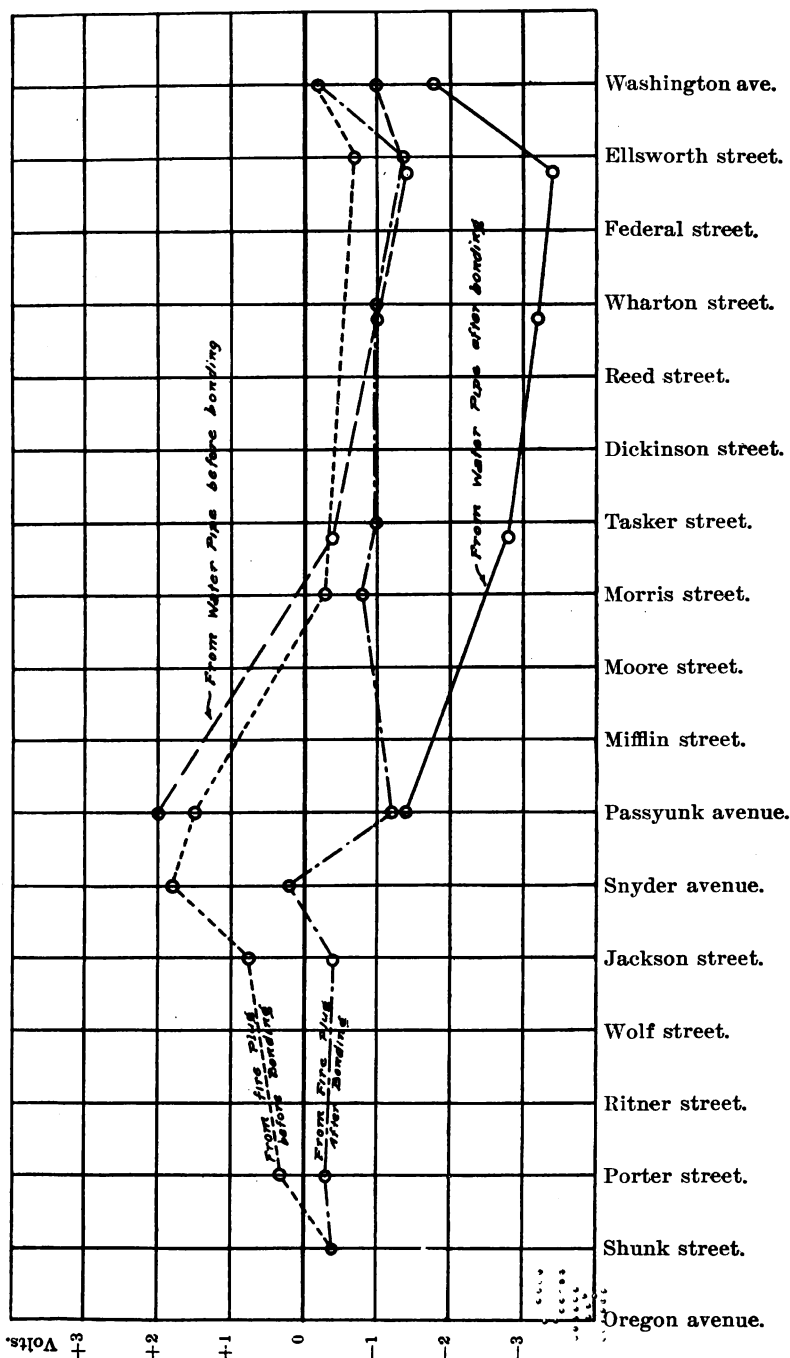


ILLUSTRATION OF THE ACTION OF TROLLEY CURRENTS BETWEEN THE TRACKS AND WATER PIPES.

20

Electrical Bureau Laboratory.

Electrolysis Tests, South Broad street, October 5 and October 17, 1907. Bond of 1,500,000 C. M. run from 48-inch steel main, Broad street and Passyunk avenue to P. R. T. Co. power house at Thirteenth street and Snyder avenue. This power house feeds all south of Washington avenue. Current flowing through bond equals 170 to 210 amperes. Estimated drop in bond carrying 200 amperes is 1.47 volts. Measured drop in P. R. T. Co.'s return system is 3 volts. All readings taken to track.



100

Non-interfering Two Party Telephone Circuit.

During the year there was developed by this Bureau a new and original scheme for a two party telephone circuit so arranged that when one party is using the 'phone the other can in no way hear the conversation or interfere therewith.

It was primarily intended for use in Police Station Houses, and an arrangement of this kind is now being installed in the Fourth District Police Station House on Race street below Fourth street.

This two party telephone scheme has been thoroughly tried out in our laboratory, and has been found to fulfill all the conditions imposed on it most satisfactorily.

Electrolytic Tests and Surveys.

During the year the effects of electrolysis on the water mains and cables in the City have been carefully watched and numerous tests and surveys have been made. It can be unreservedly asserted that at the present time there is no other city in the United States, if any in the world, that is more free from detrimental effects, due to this cause, than is the City of Philadelphia.

Ornamental Lighting in the Central Section of the City.

This scheme of illumination has been extended this year to Broad street, from Spruce street to Vine street and around City Hall, with islands of safety at the following intersections:

Broad and Spruce streets.

Broad and Locust streets.

Broad and Walnut streets.

Broad and Chestnut streets.

Broad and Arch streets.

Broad and Cherry streets.

Broad and Race streets.

Broad and Vine streets.

On Walnut street from Front street to the Schuylkill river.

On Chestnut street from Front street to the Schuylkill river.

On Market street from west of the City Hall to the Schuylkill river.

On Arch street from Front street to Twenty-first street.

Prior to the installation of these lights it was suggested, that as an investment proposition alone it would be a desirable thing for the City; this has proven to be a fact, as the increased assessments along the line of way have been such as to cost the City practically nothing, and it meets with the approval and commendation of not only the citizens of this City but of other cities as well.

The argument was made, and very properly, by you that it would prove one of the best means of police protection that you could have in connection with your Department; this is undoubtedly true.

The extension referred to above increases this installation to four hundred and sixty (460) of these ornamental lamp standards, each of which supports two (2) 2000 c. p. lamps, making a total of nine hundred and sixty (960) lamps.

It is a matter of pride to know that this whole plan of illumination was conceived, worked up and public sentiment created therefor by your Department, and great credit is attached to the work done, not only by employees of this Bureau, but the engineers of the Philadelphia Electric Company as well.

The newspapers of Philadelphia acted as a unit in



UNIQUE AUTO LAMP TRIMMER, USED IN CONNECTION WITH ORNAMENTAL
LIGHTING IN CENTRAL PART OF CITY.

OPERATING FROM LOWER SEAT.

Designed by A. H. MANWARING, Chief Engineer Arc Lights,
Philadelphia Electric Co.

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OPERATING FROM UPPER SEAT.

20



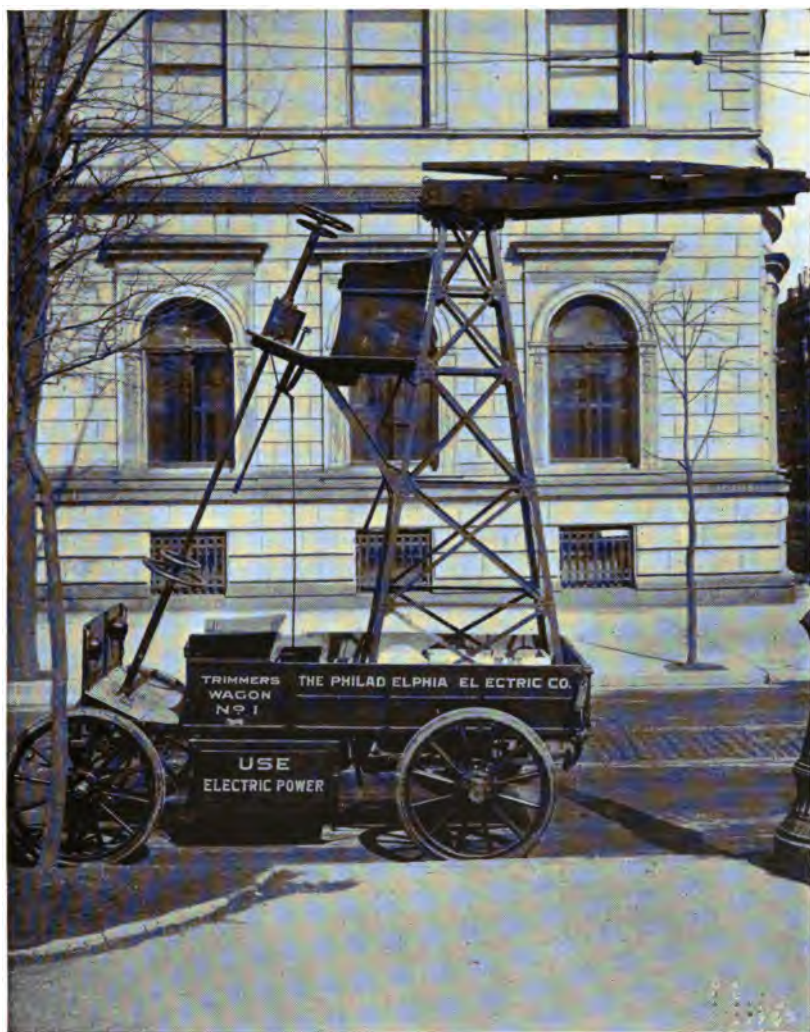
FRONT VIEW, OPERATOR AT LOWER SEAT.





FRONT VIEW, OPERATOR AT UPPER SEAT.





WAGON READY TO OPERATE.

24



SHOWING PLATFORM RAIL RAISED.

44



TRIMMING STREET LAMP.

94



TRIMMER AT EXTREME END OF PLATFORM. PLATFORM TURNED AT RIGHT ANGLES. AT POSITION OF EXTREME STRAIN.

24

advancing this great improvement, and they deserve not only the thanks of the administration, but of the entire community as well.

Reduction in the Cost for the Lighting of the City Highways with Electric Arc Lamps.

A very interesting thing and at the same time a great source of satisfaction is the reduction in the cost of City lighting for the year 1911. The difference in the cost for the lighting of the highways between the years 1910 and 1911, based on the contract price, is approximately seventy-three thousand (73,000) dollars: this is a reduction of over five and one-half ($5\frac{1}{2}$) per cent. in the cost for the lighting of the City highways between the years 1910 and 1911, and is a considerable saving to the City.

Public Utility Companies.

The Public Utility Companies of this City, coming under the supervision of this Bureau, have all paid their taxes and license charges promptly, and there is the greatest feeling of harmony, I am happy to say, existing between this Bureau and all the companies.

General Lighting of the City.

It is safe to say, to-day, that the City of Philadelphia is the best lighted city in the world. Conditions within the last three years have improved wonderfully, all of which is due principally to the great interest and activity displayed by the attaches of this Bureau, the one object in view in connection with the lighting of the highways of this City being always the maintaining of the electric lighting service at the highest point of efficiency. The employees of this Bureau, as far as they can, are con-

stantly inspecting the service, so that should any defective or unsatisfactory condition arise in this connection, the cause of the trouble is immediately ascertained and the service is at once restored to its proper condition.

It is very proper to say that all changes required for the benefit of the service are always made at the expense of the company, who cheerfully comply with every request made by the Bureau to better the lighting conditions.

The latter part of the year 1910 showed the completion in the central part of the City of the most comprehensive, and at the same time the most ornamental and satisfactory, scheme of lighting of any city, not only in this country, but in the world.

Much credit should be given to the officials and engineers of the Philadelphia Electric Company for the hearty support that they have given the undersigned in connection with this splendid scheme of illumination.

No other city in the United States, or even in Europe, can approach the completeness and effectiveness of this "Street Lighting System" which has been introduced in this City, and which it is planned to greatly extend the coming year.

There are now in service, nightly, throughout the City of Philadelphia thirteen thousand two hundred and eighty-five (13,285) City electric arc lamps, each shedding a light equal in strength to 2,000 candles.

The new lights in the central part of the City have attracted widespread attention throughout the entire country. Not only do they beautify to a great extent the streets upon which they have been erected, but they are a protection as well to the citizens, shopkeepers and residences. It is difficult to locate a dark corner in the district covered by this installation, and as a result crime

has been minimized to a large degree. It is exceedingly doubtful if a house-breaker or a hold-up man would dare to take a chance with the glare of the newly installed lights thrown in full force upon him.

For the year 1911 the appropriation for the electric lighting of the City's highways will total \$1,238,923.15. This is a sum larger than that appropriated or apportioned by any other city in the world of the size of Philadelphia for electric lighting. It represents an outlay of 77.43 cents a year per capita based on a population of 1,600,000 persons, which amounts to about 2.1 mills per light per night. The average cost for the maintenance of the electric lights upon the highways of the City is \$94.63 per year each.

All told, the electric lights in this City give out light equal to approximately 34,506,000 candles nightly. In addition to this there are thousands of lights in use on electric signs, each of 10 candle power, which are being constantly increased, and it is safe to say that there are now in use on the highways of the City of Philadelphia sufficient electric lamps to produce a light equal to about 35,000,000 candles nightly.

Compare Philadelphia's electric lighting facilities with those of the five large cities in Europe—Paris, London, Berlin, Brussels and Vienna.

Gaslight is the principal illuminating feature in the large cities abroad, although they are rapidly recognizing the superiority of the electric lighting system in the big cities, and are adopting this more modern method. In Berlin, there are in use 34,374 gas lamps. The gas burners require a new mantle every seven days, and the damage to lamps costs considerable a year to repair. Last year it required 328,542 common gas mantles; 215,792 mantles for compressed gas lamps and 19,487 gas chimneys and globes were used during the year.

There have been installed in Berlin 1,055 electric arc lamps.

Brussels has in service 6,911 gas and 210 electric arc lamps in the center of the city. They are all extinguished at midnight.

London has fifty-two (52) streets lighted by electricity and six (6) streets lighted by high pressure gas; the remainder of the streets are lighted by low-pressure gas.

The total number of electric lights in use is four hundred (400) of the open-arc type, each of which costs the municipality one hundred and twenty-six (126) dollars and fifty (50) cents a year to maintain. In the east end of London the electric arc lamps have 1,200 candle power each.

Paris has one thousand eight hundred and fifty-one (1,851) electric lights and fifty-six thousand eight hundred and nineteen (56,819) gas lamps in service. Private electric companies supply current for one thousand four hundred and sixty-one (1,461) arc lamps and eighty-five (85) incandescent electric lights. Municipal plants give electricity for three hundred and ninety (390) arc lamps. The municipality depends, to a large extent, for lighting the principal streets on the glare of the lights from shop windows. The Champ Elysees, considered the best lighted street in Paris, and one of the best in Europe, is "lighted up" nightly by two hundred and four (204) gas lanterns and four hundred and eight (408) incandescent burners.

Vienna is lighted largely by gas. It has forty thousand (40,000) gas lights on three thousand five hundred (3,500) lamp posts. The candle power of the gas lamps varies from fourteen (14) in the small streets to one hundred and ten (110) in the busy sections of the city. Twenty thousand (20,000) gas lights burn all night.

There are one thousand one hundred and fifty-five (1,155) electric arc lamps in the principal streets of Vienna, and each averages one thousand seven hundred (1,700) candle power. The ground glass globe is in use there, similar to those now in use on the newly installed lamps in the center of this City.

All of which goes to show that Philadelphia is now, as above stated, the best lighted city in the world, and it is the intention of the undersigned to use every effort to see that this position is always maintained.

Conduits Laid by Private Corporations.

The Bell Telephone Company of Pennsylvania has added to its system of underground conduits one hundred and twenty-five thousand two hundred and fifty-three (125,253) feet, aggregating three hundred and sixty thousand nine hundred and fifty-seven (360,957) feet of duct during the year.

The Keystone Telephone Company of Philadelphia has added to its system of underground conduits eight hundred and seventeen (817) feet, aggregating two thousand and eighty-eight (2,088) feet of duct during the year.

The Philadelphia Electric Company has added to its system of underground conduits thirty-six thousand nine hundred and sixteen (36,916) feet, aggregating two hundred and sixteen thousand seven hundred and twenty-five (216,725) feet of duct during the year.

The Philadelphia Rapid Transit Company has added to its system of underground conduits two thousand five hundred and eleven (2,511) feet, aggregating nine thousand six hundred and seventy-one (9,671) feet of duct during the year.

The Pneumatic Transit Company has added to its sys-

tem of underground conduits nineteen thousand nine hundred and eighty-four (19,984) feet, aggregating fifty-four thousand nine hundred and sixty-eight (54,968) feet during the year.

Recapitulation.

	Feet of Conduit.	Feet of Duct.
The Bell Telephone Company of Pennsylvania.	125,253	360,957
The Keystone Telephone Company of Philadelphia	817	2,088
The Philadelphia Electric Company.....	36,916	216,725
The Philadelphia Rapid Transit Company....	2,511	9,671
The Pneumatic Transit Company.....	19,984	54,968
	<hr/> 185,481	<hr/> 644,409

Total Amount of Conduit and Duct Laid for Electrical Purposes by Electric Light, Telegraph, Telephone and Electric Street Railway Companies.

Under the various ordinances of Councils the companies using the highways for the placing of conduits therein make returns of the quantity they laid; these returns, together with the amount owned by the City, show that there has been placed:

	Feet of Conduit.	Feet of Duct.
Underground	6,619,900	54,408,857
Of which the City owns.....	502,399	3,657,106
The amount laid in 1910 being.....	189,336	659,829

Conduits Laid and Owned by the City.

There were three thousand eight hundred and fifty-five (3,855) feet of conduits, aggregating fifteen thousand four hundred and twenty (15,420) feet of duct laid by this Bureau during the year, and seventeen (17) manholes constructed, as follows:

Manholes.	Feet of Conduit.	Feet of Duct.
1 Broad street, below McKean street.....	389	1,556
1 Broad street and Snyder avenue.....	223	894
1 East side Broad street, at Snyder avenue...	59	235
1 Broad street, below Snyder avenue.....	222	889
1 Northeast cor. Broad and Jackson streets..	212	845
1 East side Broad street, below Jackson street	254	1,018
1 Broad and Wolf streets.....	225	900
1 Broad street, below Wolf street.....	269	1,076
1 Broad and Ritner streets*.....	261	1,043
1 East side Broad street, below Ritner street..	195	781
1 Broad and Porter streets	286	1,144
1 Broad street, below Porter street	213	852
1 Broad and Shunk streets	267	1,069
1 Broad street, below Shunk street.....	200	801
1 Broad street and Moyamensing avenue.....	345	1,378
1 Broad and Oregon streets	69	275
1 West side Broad street, below Shunk street..	166	664
17	3,855	15,420

Junction Boxes Placed.

There were sixty-seven (67) large junction boxes and eleven (11) small junction boxes placed in manholes during the year, at the following locations:

	No. of Junction Boxes.
Front and Market streets.....	1 large box
Broad and Callowhill streets	1 large box
Fifteenth and Market streets	1 large box
Third and Market streets	1 large box
Second street and Girard avenue	1 large box
Twenty-third and Walnut streets	1 large box
Broad street and Pennsylvania avenue	1 large box
Broad street and Fairmount avenue	1 large box
Broad street and Girard avenue	1 large box
Broad street and Columbia avenue	1 large box
Broad street and Lehigh avenue	1 large box
Germantown and Lehigh avenues	1 large box
Seventh street and Lehigh avenue	1 large box
Second street and Lehigh avenue	1 large box
Kensington and Lehigh avenues	1 large box
Eighth street, from Callowhill street to Lehigh avenue	31 large boxes

	No. of Junction Boxes.
Berks street, from Front street to Germantown avenue	8 large boxes
Susquehanna avenue, from Broad street to Ger- mantown avenue	7 large boxes
Kensington avenue, from York street to Lehigh avenue	5 large boxes
Race street, below Fourth street	1 large box
Seventh and Chestnut streets	1 small box
Ridge avenue and Sharswood street.....	1 small box
Ridge avenue and Jefferson street	1 small box
Germantown avenue and Berks street.....	1 small box
Germantown avenue and Susquehanna avenue..	1 small box
Seventh and Filbert streets	1 small box
Fifth and Poplar streets	1 small box
Second street and Girard avenue	1 small box
Twenty-seventh street and Columbia avenue....	1 small box
Front street, below Pine street	1 small box
Frankford avenue and Ruan street.....	1 small box
Total	78

Defective Cable Replaced.

During the year this Bureau replaced four thousand four hundred and two (4,402) feet of defective cable, as follows:

	No. of Feet.
Broad street, from Diamond street to Susquehanna avenue..	600
Ruan street, from Frankford avenue to Fifteenth District, No. 4254 Paul street	380
Front street, from Pine street to manhole south of Pine street	250
Market street, from Third to Fourth street.....	432
Fourth street, from Pine to Lombard street.....	343
Walnut street, from Sixth street to manhole east of Sixth street	270
Cable pole, Front and Poplar streets	56
Cable pole, Twenty-second street and South College avenue.	48
Cable pole, Camac and Race streets	55
Cable pole, Cedar street and Lehigh avenue.....	45
Cable pole, Richmond street and Columbia avenue.....	100
Cable pole, Ridge and Allegheny avenues	140

	No. of Feet.
Cable pole, Forty-ninth and Market streets.....	145
Cable pole, Ninth street and Columbia avenue.....	125
Cable pole, Engine Company No. 36, Frankford avenue, below Decatur street	95
Cable pole, at Thirteenth District, No. 4431 Main street, Manayunk	200
Cable pole, at Twenty-seventh District, No. 6834 State road, Tacony	168
Cable pole, at Thirtieth District, Front and Westmoreland streets	330
Cable pole, at Seventeenth District, No. 1210 South Twentieth street	100
Cable pole, at Seventeenth District, No. 1210 South Twentieth street	100
Clearfield street, from Frankford avenue to Trunk 10, Clearfield street, below Frankford avenue.....	230
Federal Trust Company, northwest corner Broad and Federal streets	70
Manayunk National Bank, Main and Levering streets.....	75
Patrol Box, Eighth and Race streets.....	45
	<hr/> 4,402

New water main boxes were erected at the following locations:

Front street and Lehigh avenue.
 Front street and Indiana avenue.
 Front street and Allegheny avenue.
 Front and Somerset streets.
 Front and Huntingdon streets.
 Front and Cumberland streets.

New combination water main and fire boxes were erected at the following locations:

Front and Dauphin streets.
 Front and York streets.

New electric light poles were erected and connected to the underground as follows:

17 on south Broad street, between Passyunk avenue and Moyamensing avenue.
 1 at 623 Christian street.
 1 at Broad and Mayfield streets.

Broken fire box posts and shells were replaced as follows:

- Seventeenth and Market streets.
- Eighth and Race streets.
- Fourth and Market streets.
- Frankford and Allegheny avenues.
- Twelfth and Thompson streets.
- Ridge avenue and Parrish streets.

Broken patrol box posts and shells were replaced as follows:

- Eighth and Race streets.
- Fourth and Market streets.
- Nineteenth and Callowhill streets.
- Reese and Dauphin streets.

Made the necessary connections for the changing of the route of No. 1 alarm and No. 4 fire telephone circuit.

The following abandoned cable poles were stripped by the Bureau during the year:

- Twenty-third and South streets.
- Old Twelfth District Station House at Tenth and Thompson streets.
- Old Thirty-fifth District Station House at Olney.
- Old Nineteenth District Station House at Eighth and Lombard streets.
- Twentieth and Washington avenue.

The fire signal box at the Philadelphia Navy Yard, League Island, was changed from the overhead to the underground.

The police patrol box at the Philadelphia Navy Yard, League Island, was changed from the overhead to the underground.

Rental of Ducts in City Conduits.

By authority vested in your Department under ordinance of Councils of April 10, 1893, ducts which were

not in use by the City in its conduits and conductors in its cables were leased by the year, as follows:

	No. of Feet of Duct.
American Telegraph and Telephone Company.....	4,870
Pennsylvania Railroad Company.....	8,449
Philadelphia, Reading and Pottsville Telegraph Company	15,654
Postal Telegraph-Cable Company	43,010
Western Union Telegraph Company	9,660
Total	81,643

All the above at an annual rental of \$7,200.

Rental of Conductors in City Cables.

	No. of Feet of Conductor.
American District Telegraph Company	65,064
United Gas Improvement Company.....	843,518
Pneumatic Fire Alarm Telegraph Company.....	56,534
Pennsylvania Railroad Company	11,088
Total	967,204

All the above at an annual rental of \$5,790.

*Lighting of the City Highways by Electric Arc Lamps
by the Philadelphia Electric Company.*

Thirteen thousand two hundred and eighty-five (13,285) electric arc lamps were located on the highways at the close of 1910, as follows:

	No. of Lamps.
Paid for by appropriations of Councils.....	13,092
Girard avenue bridge, maintained by People's Traction Company	3
Maintained by electric companies (free to the City)....	104
Front street and Delaware avenue, between Vine and South street piers, and miscellaneous, maintained by Girard Estate (free to the City)	86
Grand total	13,285

There are on underground wires:

	Lamps.
City cables	856
Electric Light Company's cables.....	1,718
Girard Estate cables	86

Amounts Deducted from the Bills for the Lighting of the Highways Owing to Defective Lamps.

There were nine thousand two hundred and twenty-two (9,222) lamps reported not burning in various parts of the City during the year. The following amounts were deducted from the bills of the company having the contract covering the lights referred to:

Month.	No. of Lights.	Amount.
January	2,265	\$618 65
February	650	177 68
March	169	45 80
April	456	124 00
May	471	128 71
June	360	98 90
July	322	88 62
August	475	129 89
September	930	254 29
October	729	198 76
November	1,395	382 42
December	1,000	273 25
Totals	9,222	\$2,520 97

*Number of Electric Lights, Poles, Arms, and Length of
Cable in the City's Underground Service.*

	Lights.	Poles.	Arms.	Feet of conduit.
East side Broad street, from Market street to McKean street -----	47	47	47	23,950
East side Broad street, from McKean street to Moyamensing avenue -----	13	13	13	5,000
West side Broad street, south to Moyamensing avenue -----	59	59	59	31,320
East side Broad street, north to Lehigh avenue -----	65	65	65	36,680
West side Broad street, north to Susquehanna avenue -----	51	51	51	29,810
West side Broad street, Lehigh avenue to Germantown avenue -----	23	23	23	14,220
Arch street, south side -----	18	18	18	9,960
Chestnut Street Pier -----	19	19	-----	2,000
Walnut Street Bridge -----	21	21	21	5,000
Dickinson Square -----	8	8	8	3,000
Columbia avenue, Broad to Twenty-third street -----	19	19	19	10,000
Ridge avenue, Ninth to Twenty-third street -----	52	52	52	27,150
Lehigh avenue, north and south sides -----	35	35	35	11,200
Spring Garden street, south side -----	44	44	44	22,260
Green street, south side -----	23	23	23	12,200
Mount Vernon street, north side -----	18	18	18	9,980
Wallace street, south side -----	18	18	18	9,980
Fairmount avenue, south side -----	22	22	22	13,200
Diamond street, north side -----	42	42	42	21,800
Market street, north side -----	56	56	56	38,080
Locust street, south side -----	16	16	16	9,100
Christian street, north side -----	59	59	59	32,260
Federal street, south side -----	56	56	56	30,680
Second street, west side -----	54	54	54	27,150
Park avenue, north of Columbia avenue -----	1	1	1	500
Totals -----	856	856	820	468,710

Money Paid to the Receiver of Taxes During the Year.

One hundred and twenty-eight thousand three hundred and twenty-three (128,323) dollars and sixty-seven (67) cents were paid to the Receiver of Taxes to the credit of this Bureau during the year 1910, as follows:

License charges	\$107,954 50
Police signal and telephone service.....	2,600 00
Rent of ducts in City conduits	7,200 00
Rent of wires in City cables.....	5,790 00
Commission on telephone calls.....	567 75
Transmission of fire alarm and fire assignments.....	500 00
Miscellaneous	3,711 42
Total	\$128,323 67

Poles and Wires Taken Down by the Bureau.

There were four hundred and forty (440) poles and twenty-eight and a half ($28\frac{1}{2}$) miles of wire taken down by this Bureau during the year.

Number of Poles, Mileage of Wire, etc.

The returns made by the various telegraph, telephone, electric light, street and steam railway companies show there were overhead on the highways of the City, exclusive of those along railroad tracks, thirty-eight thousand eight hundred and thirty (38,830) wooden poles, an increase of one thousand eight hundred and eighty-nine (1,889) over 1909.

38,830 wooden poles, an increase of 1,889 over 1909.

32,583 iron poles in use by electric passenger railway companies, an increase of 66 over 1909.

5,839 City poles, wood, a decrease of 176 since 1909.

1,368 City poles, iron, a decrease of 221 since 1909.

70 Girard Estate poles, iron.

78,690

5,331 miles of wire in aerial cable, an increase of 273 miles since 1909.

6,451 miles of overhead telegraph and telephone wire, a decrease of 790 miles since 1909.

4,566 miles of electric light wire, an increase of 611 miles since 1909.

1,922 miles of City wire, an increase of 58 miles since 1909.

763 miles of trolley companies' wire.

19,033 miles. A total increase of 150 miles since 1909.

Number of Alarms of Fire During the Year.

Eight hundred and four (804) alarms of fire were transmitted over the wires during the year, of which seven hundred and nineteen (719) were first alarms; thirty-eight (38) second alarms; twelve (12) third alarms; four (4) fourth alarms; two (2) fifth alarms; one (1) sixth alarm; five (5) false alarms, and twenty-three (23) alarms were pulled by malicious persons.

In connection with the receipt of the number of alarms received during the year, in addition to the above eight hundred and four (804) alarms there were received at this office three thousand two hundred and twenty-four (3,224) "local" alarms.

There were also received at this office, over the Pneumatic Fire Alarm Telegraph System, twenty-six (26) alarms of fire, twenty-one (21) of which were false alarms.

Operations of the Municipal Telephone Exchange, Electrical Bureau, City Hall.

Twenty-seven thousand seven hundred and ninety-eight (27,798) messages were received and transmitted over the two (2) telephone switchboards during 1910. Two hundred and thirty (230) messages were for ambulance service during the year.

The above does not include the regular calls for trunk

line connections, there being approximately three million (3,000,000) of such calls answered through this exchange during 1910.

Number of Messages Transmitted over the Police Telephones.

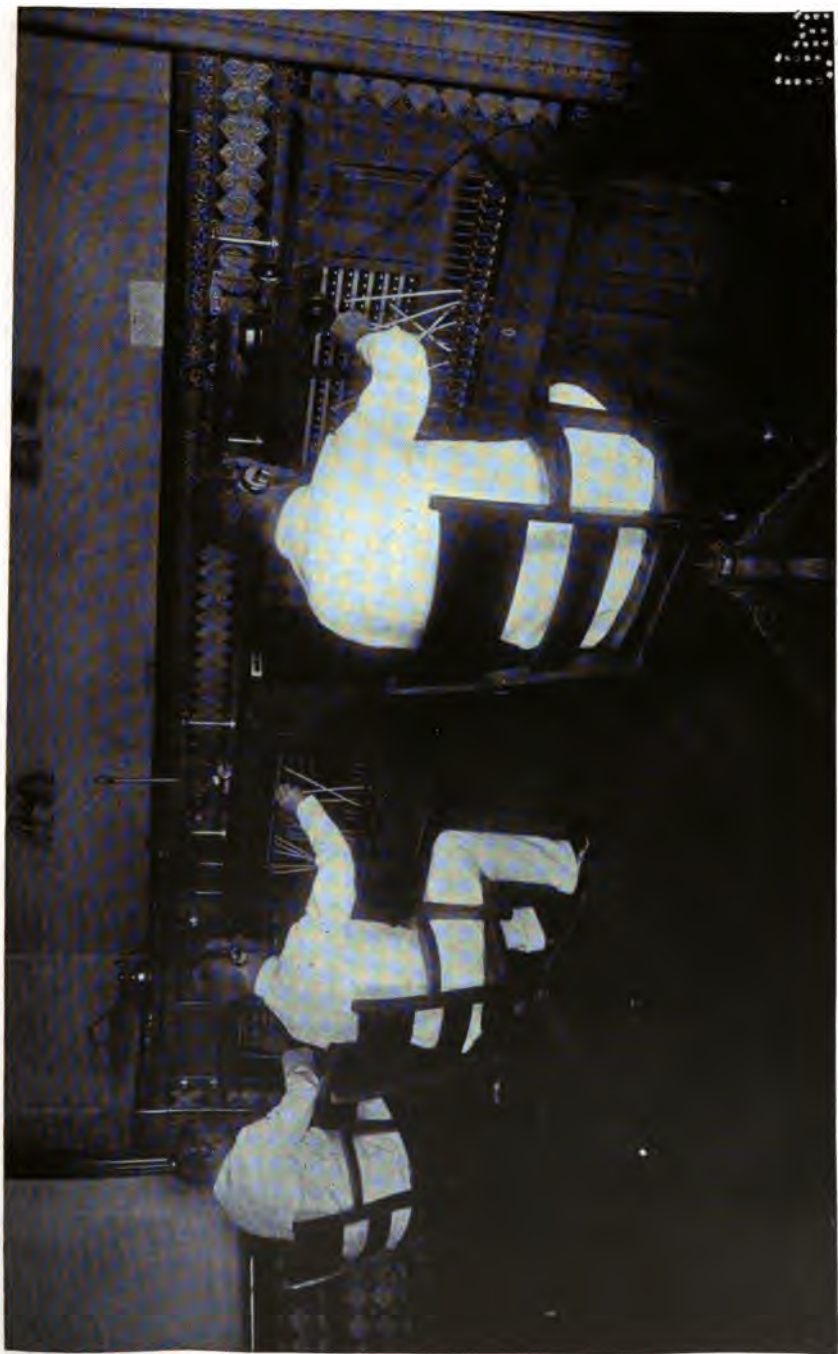
During the year 1910 there were transmitted over the police telephones of the Bureau eight hundred and thirty-four thousand seven hundred and ninety-nine (834,799) messages, an increase of seventy-two thousand two hundred and twenty-four (72,224) messages over 1909.

In connection with the work being done in this police telephone exchange, which is a very unique one, I specifically desire to call your attention to the splendid work done during the year in the general municipal telephone exchange on the sixth floor of this building.

It is a great source of satisfaction for me to know that all this important work is carried on day and night, which means three hundred and sixty-five (365) days and nights in the year, with so few mistakes and a minimum number of complaints. I sometimes question whether the great importance of the work done through both these exchanges is realized, not only by the Department but by the members of Councils and the public in general. Recent events, fresh in the memory of citizens, have proved beyond question that there is no system like it anywhere.

I desire to call your attention to the operators in both of these exchanges, who, notwithstanding their arduous duties, never raise a question when they are asked to work any and all hours, always expressing a willingness to perform any duty that may be imposed upon them any hour of the day or night.

A history of the work performed by these exchanges



MUNICIPAL POLICE TELEPHONE EXCHANGE.

is now being prepared by the undersigned, on account of the great interest displayed by the citizens and technical journals and engineers who are familiar with this kind of work, not only in this country but in many foreign countries.

The duties in these exchanges have increased to such an extent, in connection with the work referred to, that I will have to ask you to provide at least three (3) more operators to meet the existing requirements.

Reinforcement of Electric Light Poles.

There were one hundred and thirty-eight (138) electric light poles reinforced by the Bureau during the year. These poles were in a very dangerous condition owing to their being badly corroded and rusted at the base. The total cost of this work approximated one thousand seven hundred and ninety-four (1,794) dollars. To have purchased and erected new poles in these locations would have cost the City five thousand seven hundred and twenty-seven (5,727) dollars; therefore, it can be readily perceived that the above improvement resulted in a saving to the City of three thousand nine hundred and thirty-three (3,933) dollars. The locations of the poles mentioned follow:

- Christian and Swanson streets.
- Christian and Water streets.
- Christian and Front streets.
- Christian and Howard streets.
- Christian and Passyunk avenue.
- Christian and Seventh streets.
- Christian and Ninth streets.
- Christian and Tenth streets.
- Christian and Warnock streets.
- Christian and Eleventh streets.
- Christian street, west of Eleventh street.
- Christian and Twelfth streets.
- Christian street, west of Twelfth street.

Christian and Thirteenth streets.
 Christian and Broad streets.
 Christian and Fifteenth streets.
 Christian and Sixteenth streets.
 Christian and Seventeenth streets.
 Christian street, west of Eighteenth street.
 Christian and Nineteenth streets.
 Christian street, west of Nineteenth street.
 Christian and Twentieth streets. . .
 Christian street, west of Twenty-first street.
 Christian street, west of Twenty-second street.
 Christian street, west of Twenty-third street.
 Christian street, west of Twenty-fourth street.
 Christian and Stillman streets.
 Christian and Taney streets.
 Federal street, west of Front street.
 Federal street and Moyamensing avenue.
 Federal and Fourth streets.
 Federal street, west of Fifth street.
 Federal and Marshall streets.
 Federal and Seventh streets.
 Federal street, west of Seventh street.
 Federal and Eighth streets.
 Federal and Ninth streets.
 Federal and Alder streets.
 Federal and Eleventh streets.
 Federal street, west of Eleventh street.
 Federal street, west of Twelfth street.
 Federal and Fifteenth streets.
 Federal street, west of Fifteenth street.
 Federal street, west of Seventeenth street.
 Federal street, west of Eighteenth street.
 Federal street, west of Nineteenth street.
 Federal street, west of Twenty-fifth street.
 Federal and Twenty-sixth streets.
 Federal street, west of Twenty-sixth street.
 South Broad street, east side.
 South Broad street, south of Spruce street.
 South Broad and Lombard streets.
 South Broad and Webster streets.
 South Broad street, south of McKean street.
 South Broad street and Snyder avenue.
 South Broad street, south of Snyder avenue.
 South Broad and Jackson streets.
 South Broad street and Passyunk avenue.

South Broad street, south of Jackson street.
 South Broad and Wolf streets.
 South Broad street, south of Wolf street.
 South Broad and Ritner streets.
 South Broad street, south of Ritner street.
 South Broad and Porter streets.
 South Broad street, south of Porter street.
 South Broad and Shunk streets.
 South Broad street and Moyamensing avenue.
 South Broad street, south of Shunk street, west side.
 Spring Garden street, west of Eighth street.
 Spring Garden street, west of Ninth street.
 Spring Garden and Tenth streets.
 Spring Garden and Twenty-fourth streets.
 Ridge avenue and Ninth street.
 Ridge avenue and Carlton street.
 Ridge avenue and Wood street.
 Ridge avenue and Callowhill street.
 Ridge avenue and Hamilton street.
 Ridge avenue and Buttonwood street.
 Ridge avenue and Fifteenth street.
 Ridge avenue and Nineteenth street.

New Electrical Bureau Type Fire Boxes Erected.

There were one hundred and ten (110) new Electrical Bureau type fire boxes erected during the year at the following locations:

No. of Box.	Location.	Cost.
2199	Friedberger-Aaron Mfg. Co., Eighteenth and Court- land streets, private.	
2492	Delaware and Snyder avenues.....	\$68 73
2491	West side Juniper street, south of McKean street..	27 03
2489	Ontario and Witte streets.....	36 74
2487	Cheltenham avenue and Laurens street.....	45 96
2488	Second Street pike and Tabor road.....	37 79
2443	Ridge avenue and Dauphin street.....	9 71
2398	Twenty-ninth and Fletcher streets	9 64
2399	Coral and Adams street	8 52
2412	Twenty-fifth street and Montgomery avenue.....	56 02
2413	Twenty-eighth and Berks streets.....	40 60
2414	Edgemont and Somerset streets	40 23

No. of Box.	Location.	Cost.
2415	"A" and Ontario streets	\$26 63
2416	Hancock and Westmoreland streets	49 51
2417	Fifth street and Allegheny avenue.....	11 20
2418	Front and Tioga streets	33 66
2419	Fifth and Luzerne streets.....	9 17
2421	Fifth and Westmoreland streets.....	17 10
2422	Venango and "K" streets	48 25
2423	Seventy-second street and Haverford avenue.....	127 59
2425	Sixty-fourth street and Overbrook avenue	67 54
2426	Fifty-third street and Wynnefield avenue.....	101 13
2427	Fifty-fourth and Arch streets.....	51 99
2428	Fifty-sixth street and Wyalusing avenue.....	25 79
2429	Fifty-sixth and Master streets.....	35 31
2431	Fifty-ninth and Race streets	35 16
2432	Fifty-ninth street and Girard avenue.....	15 17
2433	Sixty-third street and Girard avenue.....	28 98
2434	Sixty-first and Arch streets	26 31
2435	Sixty-second and Media streets	26 20
2436	Cottman and Claridge streets	16 64
2437	Rising. Sun lane and Asylum pike.....	39 45
2438	Thirtieth and Wharton streets	18 87
2439	Twenty-fifth and Penrose Ferry road.....	9 36
2441	Magazine lane and Pennsylvania Railroad.....	127 33
2442	Twenty-sixth and Reed streets.....	20 34
2443	Twenty-sixth and Tasker streets	21 99
2445	Twenty-third street and Snyder avenue.....	112 81
2446	Nineteenth and Porter streets	9 71
2447	Twentieth and Wolf streets	21 14
2448	Thirtieth and Dickinson streets	43 45
2449	Twenty-fourth and Morris streets	33 56
2451	Eighteenth and Butler streets	24 37
2452	Nineteenth street and Erie avenue.....	44 31
2453	Wayne avenue and Dennie street	32 27
2454	Thirty-second street and Midvale avenue.....	51 90
2455	Seventh and Shunk streets	25 46
2456	Seventh and Ritner streets	6 84
2457	Sixty-seventh and Elmwood avenue	85 53
2458	Sixty-first and Elmwood avenue.....	56 14
2459	Sixty-eighth street and Buist avenue	11 06
2461	Fifty-third street and Kingsessing avenue.....	68 51
2462	Sixty-third street and Gibson avenue.....	120 10
2463	Sixty-first street and Greenway avenue.....	53 06
2464	Fiftieth street and Warrington avenue.....	50 01
2465	Sixtieth street and Woodland avenue	62 62
2466	Linden street and Torresdale avenue	11 05

No. of Box.	Location.	Cost.
2467	Rhawn and Walker streets	\$87 00
2468	Meridan and Cottage streets	33 98
2469	Eleventh and Nedro streets	76 67
2471	Fifteenth and Wingohocking streets	78 86
2472	York road and Seventieth avenue	26 71
2473	Sixth street and Hunting Park avenue	140 73
2474	Sixth and Cayuga streets	33 01
2475	Memphis and Tioga streets	83 15
2476	Frankford and Glenwood avenues	36 40
2477	Thompson and Lefevre streets	10 32
2478	Emerald and Tioga streets	32 60
2479	Fifty-seventh street and Cedar avenue	53 58
2481	Fifty-seventh and Chestnut streets	10 26
2482	Thirty-fourth and Walnut streets	15 52
2483	Forty-sixth and Chestnut streets	10 53
2484	Sixteenth street and Oregon avenue	56 04
2485	Eighth and Lombard streets	175 20
813	Fourth and Tasker streets	38 65
2159	Passyunk avenue and Tasker street	9 71
2284	Third and Federal streets	32 02
2359	Nixon street, northwest of Umbria street.....	10 70
2361	Lyceum avenue and Mitchell street	50 40
2362	Jamestown and Cresson streets	28 45
2363	Jamestown and Terrace streets.....	52 38
2364	Baynton and Herman streets.....	45 94
2365	Rhawn street and Verree road	34 67
2366	Germantown avenue and School lane.....	11 25
2367	Archer and Brighthurst streets	61 66
2368	Anderson and Philellena streets	64 76
2369	Emlen and Sharpnack streets.....	62 18
2375	Gorgas and Anderson streets	96 48
2376	Willow Grove avenue and Huron street.....	17 15
2377	Dyer and Willow streets, Frankford.....	59 36
2378	Wayne and Maplewood avenues	54 01
2379	Germantown avenue and Graver's lane.....	13 94
2381	Arrott street and Frankford avenue	13 18
2382	Melrose and Margaret streets	40 59
2383	Bustleton pike and Faust street	42 41
2384	Orchard and Womrath streets	41 62
2385	Memphis and Clearfield streets	29 03
2386	Frankford avenue and Clearfield street.....	8 52
2387	Memphis and Somerset streets	29 75
2388	Cedar and Ann streets	55 32
2389	Emerald and Wishart streets	34 53
2391	Jasper and Cambria streets	8 77

No. of Box.	Location.	Cost.
2392	Eighteenth street and Oregon avenue.....	\$67 78
2393	Twelfth and Shunk streets	87 18
2486	East Broad street, north of Porter street.....	17 90
2394	Broad street and Snyder avenue.....	32 80
2395	Forty-second and Spruce streets	24 12
2396	Forty-third street and Chester avenue.....	18 76
2397	Sedgley avenue and Dauphin street	40 25
2343	Ridge avenue and Dauphin street.....	31 14
Total		\$4,694 17

During the year the following fire boxes were moved:

Box.	Location.	Cost.
224	From Eighth and Master streets to Tenth and Thompson streets	\$65 17
1421	From Thirteenth and Chestnut streets to Thir- teenth street, north of Chestnut street.....	44 45
Total		\$109 62

Auxiliary Fire Alarm Boxes Erected During the Year.

The following Auxiliary Fire Alarm Boxes were erected and connected to the City circuits during the year:

Box.	Location.	Cost.
2724	Hess Bright Manufacturing Company, Twenty-first street and Fairmount avenue.....	\$33 26
2728	Fretz Realty Company, Tenth and Diamond streets	13 56
2726	Tracey Apartment House, Thirty-sixth and Ludlow streets	14 28
2725	Wetherill & Co., Twenty-second street and Alle- gheny avenue	15 52
2729	H. W. Butterworth Sons & Co., York and Cedar streets	15 52
2731	Haines, Jones & Cadbury, No. 1128-1144 Ridge avenue	2 26
2732	Helme & McIlhenny, No. 1339 Cherry street.....	15 67
2734	Thompson's Spa, No. 712 Chestnut street.....	6 50
2676	Charles L. Klauder Co., Allegheny avenue and "B" street	18 70
2736	Deaf and Dumb Asylum, Mt. Airy.....	71 19
2737	Philadelphia Grain Elevator Co., foot of Cambria street, Richmond	2 34
2738	No. 514-520 Ludlow street.....	18 23

No. of Box.	Location.	Cost.
2741	Scott & Williams, No. 2079 East Cumberland street	\$23 39
2744	J. W. Paxson Company, No. 1044 Beach street....	44 09
2739	Pepper Estate Building, northwest corner Fifth and Ludlow streets.....	16 23
2745	Harris Building, Nos. 718 and 724 Arch street....	4 47
2735	Sheldrake & Company, Ninth and Tioga streets..	11 42
Total		\$323 63

I desire to call your attention to the fact in connection with the above installations that all the work performed by the employees of this Bureau in the way of connecting up these boxes to the City circuits is paid for by the Auxiliary Fire Alarm Company, the City being put to no expense whatever in the matter.

Bell Telephones.

During the year the following offices in City Hall were equipped with Bell telephones:

	Cost.
Arc Light Room, No. 83, City Hall.....	\$0 59
Supreme Court, No. 452, City Hall.....	73 35
Board of Education offices, No. 696, City Hall.....	131 20
Dynamo Room, Basement of City Hall	2 01
Judge Gummey, Room 430, City Hall.....	5 25
Prothonotary's Office, City Hall.....	44 78
Office of Judge Anderson, Room 540, City Hall.....	1 17
Reserve Roll Room, No. 630, City Hall.....	17 40
Chief Clerk City Commissioner's Office, City Hall.....	2 78
Bureau of Highways and Street Cleaning, Room 334, City Hall	2 38
Probation Officer, Room 725 City Hall.....	98
Clerk of Orphans' Court, Room 413, City Hall.....	2 14
Office of Judge Orlady, Room 364, City Hall.....	1 51
Total	\$285 54

Bell Telephones.

Bell telephones were installed at the following locations during the year:

	Cost.
Residence of Chief James C. Baxter, Jr., of the Bureau of Fire, 918 New Market street.....	\$92 35

	Cost.
Office of Magistrate Campbell, 2839 Kensington avenue Residence of Magistrate Campbell, 2537 E. Somerset street	\$116 53
Residence of Common Councilman George J. Van- Houten, 28 South Thirty-fourth street.....	65 38
Residence of Magistrate Hogg, 429 Reed street.....	78 66
Residence of Record Clerk of Bureau of Police, 227 North Fifth street	23 46
Office of Magistrate Morris, 2304 Ridge avenue.....	82 13
Residence of Magistrate Morris, 2831 Oxford street. }	
Office of Magistrate Hogg, Callowhill street, east of Sixth street	50 45
Office of Magistrate Harris, 3726 Market street.....	151 46
Residence of Magistrate Harris, 4204 Chestnut street	
Residence of Lineman John MacDonald of the Electri- cal Bureau, 2633 North Chadwick street.....	29 10
Patriotic Society of Philadelphia, Independence Hall..	11 54
Councilman George H. Kelley's residence, 1633 South Broad street	85 71
Motor Cycle Squad, Tenth and Thompson streets....	4 26
Residence of Dr. Braumbaugh, 3324 Walnut street....	50 15
Headquarters of State Constabulary, 1529 Walnut street	8 57
Residence of Detective McFadden, 232 North Camac street	28 29
Residence of Common Councilman Charles E. Connell, 4602 Kingsessing avenue	84 43
Mounted Squad Stables	3 41
City Stables, Tenth and Greenwich streets.....	110 20
Residence of Police Surgeon Owen, 406 South Sixteenth street	94
Total	\$1,077 02

	Cost.
Bell Telephones were connected on separate lines at Captain Duncan's residence in Fairmount Park..	\$203 25

Keystone Telephones.

During the year the following offices in City Hall were equipped with Keystone telephones:

	Cost.
Office of the Prothonotary, City Hall.....	\$260 25
Office of City Treasurer in City Hall.....	2 33

	Cost.
Bureau of Highways and Street Cleaning, No. 334,	
City Hall	\$2 38
Court Common Pleas No. 5, No. 652, City Hall.....	3 46
Total	\$268 42

Keystone Telephones.

Keystone telephones were installed at the following locations during the year:

	Cost.
Residence of Captain of Detectives Souder, 3705 Lancaster avenue	\$31 31
Residence of Magistrate Campbell, 2537 East Somerset street	114 89
Office of Magistrate Campbell, 2839 Kensington ave	
Field Office of High Pressure Pumping Station, 2250 North Howard street	68 45
City Stables, Tenth and Greenwich streets.....	47 56
Total	\$262 21

Telephones Transferred During the Year.

The following telephones were transferred from one location to another during 1910:

	Cost.
From 1347 Toronto street to 227 North Fourth street..	\$71 40
From Second Regiment Armory to 2110 North Broad street	17 08
From Sixth Regiment Armory to Fifteenth and Arch streets	23 04
From 23 North Juniper street to 25 North Juniper street	1 25
From residence of ex-Captain of Detectives to Captain of Detectives residence, No. 3507 Lancaster avenue.	63 35
From 872 North Fifth street to 329 North Sixth street.	46 67
From 1927 North Twenty-fifth street to 1425 North Broad street	85 71
From 3516 "K" street to 1817 East Tioga street.....	18 96
From 3231 Powelton avenue to 3304 Baring street....	24 07

	Cost.
From Room 709, City Hall, to Room 712, City Hall....	\$6 26
From 1845 North Twenty-fifth street to 1927 North Twenty-fifth street	37 28
From 777 North Twenty-seventh street to 823 Leland street	61 72
From 4135 Westminster avenue to 4611 Cedar avenue..	151 26
From 1725 Wood street to Tenth and Thompson streets	3 00
Total	\$613 05

Keystone 'Telephones.

	Cost.
From 3900 Woodland avenue to 5171 Columbia avenue.	\$71 46
From Room 709, City Hall, to Room 702, City Hall....	37 56
From 1845 North Twenty-fifth street to 1927 North Twenty-fifth street	4 73
Three telephones in the offices of the Board of Educa- tion to various locations in same offices.....	131 20
Total	\$244 95

Telephone Hand Sets Installed.

The following telephone instruments in City Hall were equipped with hand sets during the year:

Location.	Cost.
2 in Room 652, City Hall (Judge Martin)	\$33 05
2 in Room 404, City Hall (Chief Clerk Milligan)....	8 38
2 in Room 408, City Hall (President of Select Coun- cil)	8 24
2 in Room 648, City Hall (Judge Staake)	2 49
2 in Room 212, City Hall (Chief Clerk, Department of Public Works)	9 49
2 in Room 214, City Hall (Assistant Director of Pub- lic Works)	9 49
2 in Room 578, City Hall (Assistant City Solicitor Scott)	9 55
1 in Room 221, City Hall (Director Clay's office)....	4 50
2 in Room 577, City Hall (Chief Clerk to Sheriff)....	6 50
Total	\$91 66

An Extension Bell was installed at the Second Regi-
ment Armory, 2110 North Broad street..... \$5 48

*New Electrical Bureau Type Wall Distribution Boxes and
Pipe Conduit Installed in City Hall.*

The following rooms in City Hall were equipped with New Type Electrical Bureau Distribution Boxes and pipe conduit during the year, there being thirty-four (34) boxes and 8,500 feet of iron pipe conduit installed:

Rooms 140, 144, 146, 148, 413, 415, 417, 460, 452, 590,
592, 594, 629, 690, 692, 694, 696, 706A, 708, 715, 717,
750, 752, 760, 504, 506, 508, 510, 130, 133, 134, 136,
138, 143, all the above equipment at a cost of.... \$829 66

Patrol Boxes in Use.

District.	Old style.	New style.	Wall.	Private.	Total.
First			15		15
Second			17	1	18
Third			19	2	21
Fourth			19	1	20
Fifth			14	6	20
Sixth			17	4	21
Seventh			19		19
Eighth			21		21
Ninth			21	2	23
Tenth			14		14
Eleventh			19		19
Twelfth			27		27
Thirteenth		18	3	2	23
Fourteenth		25	15	4	44
Fifteenth		14	10	2	26
Sixteenth	5	4	13		22
Seventeenth		5	18		23
Eighteenth			29		29
Nineteenth			20	1	21
Twentieth			14	1	15
Twenty-first		9	5	2	16
Twenty-second			9		9
Twenty-third			31	2	33
Twenty-fourth	6	5	16		27
Twenty-fifth	1	2	6		9
Twenty-sixth	1	10	12		23
Twenty-seventh	5	10	14		29
Twenty-eighth		1	19		20
Twenty-ninth	2	7	21		30
Thirtieth		12	11		23
Thirty-first		6	9		15
Thirty-second	2	6	8		16
Thirty-third	4	2	10		16
Thirty-fourth		8	4	1	13

Patrol Boxes in Use—Continued.

District.	Old style.	New style.	Wall.	Private.	Total.
Thirty-fifth		7	14		21
Thirty-sixth.....	1	3	14		18
Thirty-seventh.....	3	4	17		24
Thirty-eighth		5	5		10
Thirty-ninth			16		16
Totals.....	20	163	585	31	809

Police Wall Patrol Boxes Erected.

During the year the following police patrol wall boxes were erected:

District.	Location.	Cost.
Fourteenth District,	Mt. Airy and Germantown avenues	\$36 15
Thirty-fifth District,	Wyoming and Maple avenues.....	267 46
Twenty-seventh District,	Tulip and Levick streets.....	13 32
Sixteenth District,	Forty-first street and Parkside avenue	59 50
Thirty-fifth District,	Twentieth street and Limekiln pike	13 88
Thirty-fifth District,	Seventh street and Green lane...	237 98
Thirty-fifth District,	Sixth street and Olney avenue....	71 60
Thirty-fifth District,	Second Street pike and Tabor road	23 56
Nineteenth District,	Sixteenth and Naudain streets....	67 44
Twenty-seventh District,	in Chemical Engine House No. 6 at Bustleton.....	107 35
Twenty-seventh District,	Willets road, above Academy road	503 20
Seventeenth District,	Twenty-fifth and Morris streets..	75 52
Seventeenth District,	Nineteenth and Porter streets..	14 66
Seventeenth District,	Twenty-second and Snyder avenue	171 35
Seventeenth District,	Twenty-eighth and Morris streets	114 64
Twenty-fourth District,	Bridge Street Wharf, Bridesburg	68 60
Twenty-fourth District,	Amber and Silver streets....	61 31
Fifteenth District,	Harrison and Oakland streets.....	89 33
Thirty-second District,	Sixty-second street and Gray's avenue	80 17
Twenty-third District,	Sydenham street, north of Master street	73 12
Total		\$2,150 14

Booth Patrol Boxes Replaced by Wall Patrol Boxes.

Booth Patrol Boxes were replaced by Wall Patrol Boxes at the following locations:

District.	Location.	Cost.
Twenty-first District,	Forty-fourth and Sansom streets	\$87 31
Thirtieth District,	Third and Cambria streets.....	25 03
Seventeenth District,	Twenty-fifth and Federal streets.	17 07

District.	Location.	Cost.
Thirty-first District,	Uber street and Susquehanna avenue	\$13 30
Thirty-first District,	Twenty-third and Huntingdon streets	20 10
Fifteenth District,	Orthodox and Oakland streets.....	19 08
Twenty-seventh District,	Asylum pike, in front of Asylum gate	18 15
Twenty-seventh District,	Torresdale avenue and Long-shore street	24 20
Thirty-fourth District,	Sixteenth and Porter streets..	17 68
Twenty-fourth District,	Kensington avenue and Tioga street	86 68
Thirty-sixth District,	Sixth and Clearfield streets.....	18 36
Thirty-sixth District,	Fifth and Cayuga streets.....	22 04
Thirty-fifth District,	Stenton avenue and Church lane..	18 99
Thirty-seventh District,	Eighth and Mifflin streets....	13 86
Fourteenth District,	Green and Carpenter streets.....	19 76
Fourteenth District,	Philadelphia and Reading R. R. Depot, Chestnut Hill	350 39
Second District,	Front and Christian streets.....	199 55
Total		\$971 55

*Old Style Patrol Boxes Replaced by New Electrical
Bureau Type Wall Patrol Boxes.*

During the year the New Type of Electrical Bureau Wall Patrol Boxes were erected at the following locations in place of the old style patrol boxes:

District.	Location.	Cost.
Third District,	Delaware avenue and Chestnut street..	\$193 97
Third District,	Sixth and Chestnut streets.....	189 62
Third District,	Fifth and Walnut streets.....	161 54
Third District,	Front and Walnut streets.....	161 54
Third District,	Third street, opposite Dock street....	163 34
Third District,	Seventh and Walnut streets.....	161 54
Third District,	Dock and Walnut streets.....	182 24
Third District,	Independence Square	252 29
Fourth District,	Delaware avenue and Arch street....	232 73
Fourth District,	Sixth and Arch streets.....	224 73
Fourth District,	Chestnut Street Pier	175 81
Fourth District,	Second and Arch streets.....	175 57
Fourth District,	Fifth and Market streets.....	26 31

District.	Location.	Cost.
Fourth District, Sixth and Market streets.....		\$79 60
Fourth District, Second and Market streets.....		26 36
Fourth District, Seventh and Market streets.....		26 41
Fourth District, Delaware avenue and Market streets.		26 41
Fifth District, Nineteenth and Chestnut streets.....		87 31
Fifth District, Ninth and Walnut streets.....		161 54
Fifth District, Twenty-first and Walnut streets.....		161 54
Sixth District, Eleventh and Arch streets.....		184 78
Sixth District, Eighth and Arch streets.....		30 29
Sixth District, Tenth and Arch streets.....		179 25
Sixth District, Thirteenth and Market streets.....		77 32
Sixth District, Eleventh and Market streets.....		19 61
Twentieth District, Twentieth and Arch streets.....		26 44
Twentieth District, Nineteenth and Market streets....		72 52
Twentieth District, Twenty-third and Market streets..		41 91
Twentieth District, Seventeenth and Market streets..		34 74
Twentieth District, Twenty-first and Market streets..		33 68
Fourth District, Third and Market streets.....		34 67
Fourth District, Fourth and Chestnut streets.....		35 76
Fifth District, Broad and Sansom streets.....		29 52
Sixth District, Ninth and Market streets.....		31 35
Total		\$3,702 24

Changes in Locations of Patrol Boxes.

The following changes in the locations of patrol boxes were made during the year:

	Cost.
From Seventh and Spruce streets to Eighth and Lombard streets	\$31 76
From Perth and Master streets to Tenth and Thompson streets	11 54
From Darien and Poplar streets to another pole at same location	12 16
From Franklin street and Indiana avenue to 608 Indiana avenue	8 25
From Lombard street, east of Twenty-fifth street, to in front of car barn at Twenty-fifth and Lombard streets	8 47
From Nineteenth and Passyunk avenue to Twentieth street and Passyunk avenue.....	13 66
Total	\$85 84

Cables were tested and connected as follows:

Eighth street, from Girard avenue to Germantown avenue	\$128 00
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Cables were transferred to new ducts on:

Frankford avenue, from Huntingdon to Somerset street	\$204 40
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Electrical Mechanical Gongs were transferred from one location to another at

United Gas Improvement Building, Eighth and Diamond street, from third to second floor.....	\$4 10
District Engineer's gong, from 2217 Race street to 2118 Summer street	35 66
Total	\$39 76

Electro Mechanical Gong was disconnected at the Residence of Assistant Fire Marshal Upton, 46 West Washington lane

	\$6 13
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During the year Protector Boards were installed in old station houses as follows:

Thirtieth District, Front and Westmoreland streets..	\$466 01
Seventeenth District, Twenty-first and Federal streets.	357 05
Total	\$823 06

New Police Stations were equipped during the year as follows:

District.	Location.	Cost.
Twelfth District, Eighth and Jefferson streets.....		\$106 17
Thirty-fifth District, Branchtown.....		1,174 03
Twenty-fourth District, Belgrade and Clearfield streets		421 54
Eighth District, Tenth and Buttonwood streets.....		275 58
Fourth District, Race street, east of Fourth street....		800 89
Total		\$2,778 21

New Fire Houses were equipped during the year as follows:

Engine Company No. 26, Tenth and Buttonwood streets	\$16 00
Engine Company No. 28, Belgrade and Clearfield streets	17 50
Total	<hr/> \$33 50

New Truck Houses were equipped at the following locations during the year:

Truck Company No. 8, Germantown avenue and Bringhurst street	\$37 58
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The following new Patrol District was established:

Thirty-ninth District, 4212 Ridge avenue.....	\$520 00
The Ninth District Sub-station House at 1725 Wood street was disconnected at a cost of.....	\$15 06
An advance signal bell was connected at the residence of Dr. DaCosta, 2045 Walnut street, at a cost of..	\$30 04

New Central Station Office Sets and Shearing Registers were installed in the following Police District Station Houses:

District.	Location.	Cost.
Twenty-first District,	3206 Woodland avenue.....	\$41 12
Nineteenth District,	Pine street, west of Twelfth street	42 06
Twenty-fourth District,	Belgrade and Clearfield streets	42 68
Twenty-third District,	Northwest corner Nineteenth and Oxford streets	41 78
Ninth District,	Twentieth and Buttonwood streets....	41 75
Eighth District,	1012 Buttonwood street	41 60
Fourth District,	north side of Race street, east of Fourth street	43 02
Total		<hr/> \$294 01

New Advance Signal Bells were installed in the following Police Stations:

District.	Location.	Cost.
First District,	1923 Fitzwater street.....	\$21 40
Second District,	Second street, above Christian street..	21 37
Third District,	321 Delancey street	21 37
Fourth District,	Race street, east of Fourth street....	21 50
Fifth District,	215 South Fifteenth street.....	21 39
Sixth District,	235 North Eleventh street.....	21 49
Seventh District,	321 Fairmount avenue.....	21 57
Eighth District,	1012 Buttonwood street.....	21 45
Ninth District,	Twentieth and Buttonwood streets....	21 41
Tenth District,	1417 North Front street.....	21 49
Eleventh District,	615 East Girard avenue.....	21 37
Twelfth District,	Eighth street, below Jefferson street.	20 90
Thirteenth District,	4431 Main street, Manayunk....	21 77
Fourteenth District,	West Haines street, Germantown.	21 45
Fifteenth District,	4254 Paul street.....	21 50
Sixteenth District,	southwest corner Thirty-ninth street and Lancaster avenue.....	21 37
Seventeenth District,	1210 South Twentieth street....	21 51
Nineteenth District,	Pine street, west of Twelfth street	21 50
Twentieth District,	253 North Fifteenth street.....	21 35
Twenty-second District,	2700 Park avenue.....	21 63
Twenty-third District,	northwest corner Nineteenth and Oxford streets	21 45
Twenty-fourth District,	southwest corner Belgrade and Clearfield streets	21 45
Twenty-fifth District,	1507 Moyamensing avenue.....	21 50
Twenty-seventh District,	6834 State road, Tacony.....	21 47
Twenty-eighth District,	1900 North Twentieth street..	21 35
Twenty-ninth district,	603 North Sixty-first street....	21 35
Thirtieth District,	3300 North Front street.....	21 33
Thirty-first District,	Twenty-sixth and York streets..	21 45
Thirty-second District,	6438 Woodland avenue.....	21 53
Thirty-third District,	northwest corner Seventh and Carpenter streets	21 50
Thirty-fourth District,	northwest corner Fifteenth street and Snyder avenue.....	21 41
Thirty-fifth District,	York road and Champlost street	20 47
Thirty-sixth District,	3967 Germantown avenue.....	21 45
Thirty-seventh District,	Fourth street and Snyder ave- nue	21 37
Thirty-eighth District,	Thirty-seventh street and Woodland avenue	21 68

District.	Location.	Cost.
Thirty-ninth District,	4212 Ridge avenue.....	\$21 47
Fourteenth District, Sub.,	Chestnut Hill	21 45
Twenty-seventh District, Sub.,	Holmesburg.....	21 50
Twenty-fourth District, Sub.,	Bridesburg.....	21 50
Thirtieth District, Sub.,	Roxborough.....	21 47
Twenty-first District,	3206 Woodland avenue.....	21 23
Eighteenth District,	northwest corner Fourth and York streets	21 37
Twenty-sixth District,	Trenton avenue and Dauphin street	21 50
Total		\$921 05

*Installations, Extensions and Changes Made in Connection
With the Electric Light Wiring in City Hall.*

The number of incandescent and arc lamps in City Hall at the end of the year 1910, together with the locations by floors, is as follows:

	Arc Lamps.	Incan- descent Lamps.
Basement	4	1,494
First floor	90	1,887
Second floor	33	2,314
Third floor	30	1,035
Fourth floor	20	2,829
Fifth floor	32	950
Sixth floor	41	1,938
Seventh floor	24	1,130
Eighth and ninth floors	16	421
Tower	16
Clock face	548
Memorial lamp posts on City Hall pavement.....	..	800
Totals	306	15,346

Of the above lamps there were five hundred and forty-four (544) new incandescent lamps added during the year 1910, increasing the total number from fourteen thousand eight hundred and two (14,802) to fifteen thousand three hundred and forty-six (15,346) incandescent lamps.

For the maintenance of the arc lamps during the year

there has been used about fifteen thousand (15,000) carbons, two hundred and twenty (220) dozen inner globes and forty (40) outer globes, together with repairs and renewals of parts at a cost of five thousand eight hundred and thirty-two (5,832) dollars.

Under the head of maintenance of the incandescent lighting system there has been three thousand nine hundred and sixty-three (3,963) jobs taken care of, including new work and repairs, such as renewing burnt out lamps, renewing fuses, rewiring fixtures, replacing worn out cords, sockets, etc., amounting in cost to eight thousand five hundred and seventy-three (8,573) dollars and eighty-seven (87) cents.

The total number of burnt out lamps during the year amounted to eight thousand six hundred and seventy-three (8,673).

There has been used during the year eight hundred and twenty-six (826) 50 candle power gem lamps; three hundred and sixty-one (361) 100 candle power gem lamps, and three hundred and sixty-six (366) outer globes in the maintenance of the memorial lamp posts, at a total cost of six hundred and fifty-seven (657) dollars and sixty-two (62) cents.

During the year 1910 the City Hall was illuminated a number of times, the decorations consisting of outlining the building with incandescent lamps, erecting electrically illuminated set pieces, and illuminating the statue of William Penn on top of the tower with searchlights.

In connection with the electric light plant of City Hall, the records show that the daily average load during the year 1907 was two thousand three hundred and seventy (2,370) amperes. This has increased until in the year 1910 it has reached the average daily value of 3,320 amperes, which represents an increase of thirty-one per cent. (31%).

On dark days during the year the maximum load has reached the total of 6,100 amperes. This load is below the normal electrical capacity of the plant, which is 1,000 kilowatts, or 8,000 amperes, but the boiler plant has been taxed at times to furnish the necessary power for it in addition to the other services it supplies. This condition of affairs exists on a cold, dark day, when in addition to having the maximum electric light load, we have a heavy heating load, and also the regular elevator pump load. In such a case the full capacity of the boiler plant is taxed, and if any breakdown occurs in the boiler plant, we are obliged to call upon the Electric Light Emergency Service to help us out while the repairs to the boilers are being made.

Electrical Installations and Repairs Made to Police, Police Patrol, Fire Stations, etc.

I desire to call your attention to the fact that in connection with the electrical installations of the police, police patrol, fire stations, etc., all the fixtures and panel boards in connection with these buildings were designed by this Bureau, and all the work in connection with the complete installation of these stations was done by the employees of this Bureau, and I do not hesitate to say that the work performed by these men in connection with these most important installations is of the highest order.



NEW YEAR'S ILLUMINATION OF CITY HALL.

20

The electrical installation and equipment of the various stations follows:

Name and Location of Station.	Number of Fixtures.	Incandescent Lamps.	Panel Boards.	Telephone Outlets.	Call Bells.
Fourth District Police Station and Patrol Garage, Race street, below Fourth street	124	205	{1-16 circuit } {1- 8 circuit }	4	12
Eighth District Police Station and Patrol Garage, Buttonwood street, west of Tenth street.	127	218	{1-20 circuit } {1- 8 circuit }	4	12
Twelfth District Police Station and Patrol Garage, Eighth street, below Jefferson street	91	175	{1-14 circuit } {1-10 circuit }	4	11
Twenty-fourth District Police Station and Patrol Garage, southwest corner Belgrade and Clearfield streets.	100	193	{1-18 circuit } {1- 6 circuit }	4	11
No. 26 Fire Engine House, Buttonwood street, west of Tenth street.	43	89	1-10 circuit	-----	6
No. 28 Fire Engine House, Belgrade street, south of Clearfield street.	33	67	1-10 circuit	-----	4
No. 2 Fire Truck House, Florist street, below Fourth street.	38	67	1-10 circuit	-----	4
No. 5 Fire Truck House, Sixteenth street, below Fitzwater street.	40	75	1-10 circuit	-----	4
No. 8 Fire Truck House, 5231 German-town avenue	51	141	1- 8 circuit	-----	7
High Pressure Pumping Station, Seventh street and Lehigh avenue.	130	388	1-34 circuit	4	2

All the above stations and fire houses went into service with the exception of the Fourth District Police Station, Fire Truck Houses Nos. 2 and 5, and the High Pressure Pumping Station, Seventh street and Lehigh avenue, in which the fixture installation has not been completed.

The basement of the Third District Police Station was rewired, and the wires encased in iron conduit.

The Thirty-fifth District Police Station, Garage and Stable was completed in 1908; was lamped up and current turned on May 3, 1910. Station went into service May 11, 1910.

A new main service was installed in the old Twelfth District Police Station House, Tenth and Thompson streets, now used by the Motor Cycle Squad. The toilet room on the second floor and the basement were rewired, and two (2) additional lights in the toilet, and six (6) additional lights in the basement were installed, all new work being done in iron conduit.

At the House of Correction, Holmesburg, two (2) lights in the motor room, and four (4) lights over elevator doors were installed.

This Bureau installed five (5) lights in the Immigration Station, pier 80 South Wharves; also installed eight (8) lights in the offices on the first floor of pier.

An 18-inch reflector 35 ampere G. E. search light was installed by this Bureau in the watch tower at the Eastern Penitentiary.

A new service switch and automatic current breaker was installed in the motor house of the bridge over Frankford Creek at Bridge street. The controller was completely overhauled and put in first-class condition. The apparatus is now operating satisfactorily.

In addition to the above work repairs to all police stations, fire houses, bath houses, etc., have been promptly made.

A regular inspection of the electrical apparatus carried by the various theatrical companies has been made each Monday during the year.

Special attention was paid to the inspection and testing of the electrical installation of the new Nixon Theatre, Fifty-second and Ludlow streets, and the new Liberty Theatre, Columbia avenue, west of Broad street, in both of which the electrical work was done under the supervision of this Bureau.

This Bureau installed in the basement of the Girls' High School, Seventeenth and Spring Garden streets, a 100 am-

pere double throw switch to throw the A. C. to D. C. current on lines on third floor laboratory switchboard. The two (2) circuits were installed in the laboratory to feed a small motor and receptacles for experimental work. Three (3) circuits were run from the laboratory switchboard and three (3) plugging receptables were installed in class rooms on third floor. We ran a circuit to and installed a three-gang plugging receptacle to furnish storage battery current to floor sockets in laboratory receptacles marked No. 1—charging—Nos. 2 and 3 discharging.

Inventory.

Inventory of instruments and fixed property in use, and stock of the City under the care of this Bureau :

498,544 feet of conduit.

3,641,686 feet of duct.

96,972 feet of terra cotta duct in conduit.

1,510 manholes.

510 iron signal box posts.

377 iron patrol box posts.

62 iron water main box posts.

140 fire box posts and fire water main telephone boxes and equipment.

185 miles of telegraph and telephone cable underground.

5,297 miles of telegraph and telephone conductors underground.

75 iron box telephones.

54 miles of electric light cable underground.

1,837 junction boxes.

1,867 miles of overhead wire.

5,839 wooden poles.

1,655 iron poles.

930 mast arms.

1,474 cells Callaud battery.

4,181 cells storage battery.

1,100 Leclanche and dry batteries.

1,862 fire signal boxes, one hundred and seventeen (117) of which are private, sixteen (16) on stages of theatres, and one hundred and eighty-seven (187) auxiliarized in private institutions.

- 145 keyless doors on fire signal boxes.
- 110 bell magnets for fire signal circuits.
- 110 keys on fire signal circuits.
- 906 police patrol signal and telephone boxes, of which five hundred and twenty-five (525) are wall, and thirty-two (32) are located in banks and other private institutions.
- 13 special Central Office telephone sets.
- 39 police signal and telephone office sets.
- 207 police booths.
- 1,198 telephones (City), including two hundred and five (205) water main instruments and five (5) office sets.
- 645 telephones (Bell Company), including eight (8) sets on switchboard.
- 543 telephones (Keystone Company), including four (4) sets on switchboard.
- 126 alarm instruments located in engine houses, depots, etc., of which thirty (30) are private.
- 88 bell magnets and keys, connected with fire signal and telephone service.
- 14 banks of relays, five (5) circuits to a bank.
- 2 four-dial manual transmitters.
- 1 automatic advance repeater.
- 1 fire alarm circuit switchboard, capacity fifty (50) circuits.
- 1 storage battery switchboard, capacity sixty (60) circuits.
- 6 inking registers, ten (10) circuits each.
- 1 rotary switch, capacity seventy-five (75) circuits.
- 1 telephone switchboard (Keystone Company), capacity four hundred (400) circuits and forty (40) trunks.
- 1 telephone switchboard (Bell Company), capacity five hundred (500) circuits and one hundred (100) trunks.
- 1 police telephone switchboard (Bell Company), capacity eighty (80) circuits and fifteen (15) trunks.
- 1 police telephone switchboard (Keystone Company), capacity eighty (80) circuits and twenty (20) trunks.
- 2 direct connected dynamos for charging storage battery, Bell Telephone switchboard.
- 4 motor dynamos for telephone switchboard work.
- 1 switchboard for fire water main telephone service, capacity six (6) circuits.
- 850 automatic protectors.
- 850 half ampere fuses in glass tubes.
- 850 heat coils and carbon arresters.

- 211 anvils for testing purposes.
 - 1 combined protector and cross-connecting frame, capacity four thousand (4,000) wires.
- 52 police instruments.
- 52 relays on marble bases for police instruments.
 - 1 laboratory cable testing set for measuring insulation, capacity and conductor resistance, consisting of:
 - 1 high sensibility galvanometer.
 - 1 extra ballistic tube for use with same.
 - Special lamp and scale.
 - 1 resistance box, 100,000 ohms.
 - 1 Ayrton universal shunt.
 - Special .3 M. F. condenser with highly insulated infinity plug.
 - 2 double pole double-throw switches, highly insulated.
 - 1 single pole double-throw switch, highly insulated.
 - 1 special double pole double-throw switch.
 - 1 short circuiting key on pillars.
 - 1 Kemp's discharge key.
 - 1 Wheatstone bridge 10 ratio coils, 2 each of 1-10-100, 1,000-10,000.
- 1 portable insulation and capacity testing set.
- 1 portable telescope galvanometer.
- 2 fault finders.
 - 1 bridge for locating faults on power circuits.
 - 1 dial decade portable testing set.
 - 1 A. C. voltmeter with card resistance for 20,000 volts.
 - 1 No. 1 station photometer.
- Standardizing apparatus for direct current ammeters and voltmeters consisting of:
 - 1 potentionmeter.
 - 1 regulating rheostat.
 - 1 wall D'Arsonval galvanometer.
 - 1 volt box.
 - 1 Weston standard cell.
 - 1 standard resistance .1 ohm, capacity 15 amperes.
 - 1 standard resistance .001, capacity 300 amperes.
- 1 complete set of Thompson's reflecting galvanometers.
- 1 Bunnell galvanometer and Wheatstone bridge.
- 1 Bradley galvanometer and rheostat.
- 1 Weston direct and alternating current voltmeter.
- 6 Weston direct current voltmeters.
- 1 Weston direct current milli voltmeter.

- 4 Weston direct current ammeters.
 - 2 Weston direct current milli ammeters.
 - 1 Weston multiplier for direct current voltmeter.
 - 2 Weston direct current voltammeters.
 - 5 dynamos with a capacity of two hundred (200) K.W. each.
 - 7 engines and dynamos, one each on fire boat "Stuart," police boats "Ashbridge," "Stokley" and "King," and three (3) ice boats with searchlights and all necessary incandescent lamps, switches, etc.
 - 4 550-volt—57 H. P. armored motors for operation of Gray's Ferry bridge, together with two (2) controllers, two (2) collector rings, two (2) marble switchboards, each containing the necessary volt and ammeters and automatic circuit breakers, and a 2 H. P. direct coupled motor to operate an air whistle.
 - 1 550-volt—17 H. P. armored motor and controller to operate drawbridge on Bridge street, crossing Frankford creek.
 - 2 direct current dynamotors for furnishing current to Fifth District patrol and call bell equipment in the station house.
 - 2 A. C. motor generators for furnishing current to Twentieth District patrol and call bell equipment.
 - 1 A. C. motor generator for furnishing current to Twenty-first District patrol and equipment.
 - 1 D. C. dynamotor for furnishing current to Nineteenth District equipment.
 - 1 A. C. motor generator for furnishing current to Eighth District patrol and call bell equipment.
 - 1 A. C. motor generator for furnishing current to Twelfth District patrol and call bell equipment.
 - 1 A. C. motor generator for furnishing current to Thirty-fifth District patrol and call bell equipment.
 - 1 A. C. motor generator for furnishing current to Twenty-fourth District patrol and call bell equipment.
 - 1 A. C. motor generator for furnishing current to Ninth District patrol and call bell equipment.
 - 1 A. C. motor generator for furnishing current to Twenty-third District patrol and call bell equipment.
 - 1 D. C. dynamotor for furnishing current to Fourth District patrol and call bell equipment.
- Hundreds of push buttons, calls, buzzers, etc.

*Estimated Cost of Instruments and Property of the City
in Use by the Electrical Bureau.*

3,641,686 feet of creosoted wood duct in conduit....	\$1,092,505 80
15,420 feet of terra cotta duct in conduit.....	9,252 00
96,972 feet of terra cotta duct conduit.....	5,769 83
1,510 manholes	105,700 00
510 iron signal box posts.....	8,160 00
377 iron signal box posts.....	6,182 80
62 water main box posts.....	1,016 80
140 fire box posts and fire water main tele- phone boxes and equipment.....	5,810 00
75 iron box telephones	3,243 75
185 miles of telegraph and telephone cable in- stalled	291,375 00
54 miles of electric light cable installed....	78,300 00
39 Police signal and telephone office sets....	9,750 00
60 miles of overhead No. 10 copper wire.....	3,615 00
1,837 junction boxes	20,666 25
1,867 miles of overhead wire.....	115,754 00
5,839 wooden poles	61,309 50
1,368 iron poles	41,040 00
930 mast arms	55,800 00
1,474 cells of Callaud battery	1,842 50
4,181 cells of storage battery	4,348 24
1,574 fire alarm signal boxes.....	196,750 00
145 keyless doors	5,800 00
110 keys on line signal circuits.....	1,100 00
110 bell magnets for fire signal circuits.....	2,750 00
906 police patrol boxes.....	135,900 00
207 police patrol booths.....	38,295 00
Central Station apparatus.....	397 00
12 special telephone sets	534 00
1,188 telephones	5,464 80
101 gongs	10,756 50
88 bell magnets and keys combined.....	2,024 00
50 bell magnets	1,000 00
14 banks of relays, 5 circuits to a bank.....	2,240 00
2 4-dial manual transmitters	9,750 00
1 automatic advance repeater	} 12,200 00
1 fire alarm circuit switch board.....	
1 storage battery switchboard	
6 inking registers	6,000 00

1 rotary switch	\$450 00
1 switchboard for water main service.....	30 00
1 motor dynamo	50 00
850 automatic protectors	2,677 50
850 one-half ($\frac{1}{2}$) ampere fuses in glass tubes..	1,700 00
850 heat coils and carbon arresters.....	1,487 50
211 anvils for testing purposes.....	1,055 00
1 cross connecting rack	250 00
52 police instruments	2,912 00
52 relays on marble bases.....	962 00
1 Bradley galvanometer and rheostat.....	15 00
1 Weston direct and alternating current volt- meter	60 00
6 Weston direct current voltmeters	360 00
1 Weston direct current milli voltmeter....	58 50
4 Weston direct current ammeters	232 00
2 Weston direct milli ammeters	127 50
1 multiplier for direct current voltmeter....	9 25
2 Weston direct current voltammeters.....	150 00
15 motor generators, including installing and switchboards	1,875 00
4 dynamotors	180 00
Telephone switchboards and equipment...	70,000 00
1 main distributing frame	1,550 00
Testing instruments and laboratory.....	2,565 50
6 typewriters	600 00
1 Elliott-Fisher billing machine.....	165 00
40 steel lockers	234 00
1 automobile	850 00
28 memorial lamp posts	25,375 00
Boundary tablets and seals for memorial poles	1,036 00
Cable for memorial lamp posts.....	6,243 75
1 search light	311 00
8 search lights and covers.....	2,400 00
20 fan motors	400 00
306 incandescent arc lamps	4,590 00
40,000 incandescent lamps	6,240 00
4 375 H. P. boilers	18,520 00
4 375 H. P. boilers	18,520 00
1 50 H. P. engine and fan	3,000 00
1 50 H. P. engine and fan	3,000 00
1 well pump	175 00
1 well pump	300 00
1 well pump	151 00

4 boiler feed pumps	\$1,200 00
5 Ames engines and Westinghouse dynamos..	50,000 00
1 house pump	1,500 00
1 house pump	2,000 00
1 switchboard	10,000 00
18 vertical hydraulic elevators	121,500 00
4 vertical hydraulic elevators	30,000 00
1 direct electric elevator	27,000 00
and cushion	30,750 00
3 hand-power elevator machines	1,000 00
1 pressure tank	718 00
5 pressure tanks	3,500 00
4 discharge tanks	1,200 00
5 elevator pumps	23,000 00
Emergency electric lighting circuit in City	
Hall and equipment	10,000 00
Wiring in City Hall	50,000 00
Office furniture	1,000 00
Miscellaneous supplies	20,000 00
Total	\$2,932,738 27

Recommendations.

I would also respectfully request, as I did in my last report, that provisions be made at as early a date as possible for the complete rehabilitation of the fire alarm equipment in this building. As I stated in my previous report, there is no "Emergency Equipment" here of any kind to take care of any possible "emergency" that may arise at any moment. If the new plant should be installed the old equipment that is here now could be "tied in" as an emergency plant, so that the City would be amply protected at all times.

I would also recommend that arrangements be made at an early a date as possible, which I referred to in my last report, for the installation of a "Repair Shop," for the purpose of making all necessary and essential repairs to the various instruments that come under the supervision of this Bureau. It would cost but \$5,000 to install this

plant, and I earnestly request that you give it your serious consideration.

I would also request and earnestly recommend that all the fire houses in the City be connected by direct lines to this Bureau. At the present time there are from two to eight stations on one line, making it at times physically impossible in cases of great emergency to get many of the stations referred to; this is a serious condition of affairs and should be modernized without further delay.

I would also recommend that all City officials who are connected with the administration of City affairs be connected by telephone direct to this Bureau.

I again desire to call your attention to the great revenues derived from the collection of premiums by the first insurance companies doing business in this City. This income covers the collection of premiums written on fire insurance in connection with the various buildings and properties within the county line.

It occurred to the undersigned that, in view of the fact that these companies depend for their profits principally upon the keeping down or limiting the "fire hazard," which fact is due to the great and extensive fire alarm equipment of the City of Philadelphia, erected and maintained at great expense entirely by the City, in order to help maintain this system a certain percentage of every premium written in connection with fire insurance in this City should be set aside for the purpose of helping to maintain this entire equipment. This should be done either by legislation or by some other means. Many of these companies, I understand, are foreign corporations.

Revision of Salaries of the Electrical Bureau.

I desire to call your attention to the serious condition of the Technical Staff of this Bureau.

Owing to the fact that the technical men of this Bureau

are paid nothing more than laborers' wages, it is, of course, natural that they should seek other avenues where their services would be more appreciated, and where they will receive compensation that their skilled services warrant. Every graduate of technical institutions that this Bureau has had as part of the force has resigned to take a place with private corporations for the reasons above stated. The last one, who was an extremely capable engineer, and who was broken into such an extent that he was thoroughly familiar with the technical details of the work coming under the supervision of this Bureau, resigned a short time ago to take a place at \$1,600 per year as teacher in the Trades School of this City. He was on the pay roll of this Bureau at \$1,100 per year. The resignation of this engineer leaves this Bureau with practically one man that can be classed as a technical man. This Bureau needs today badly at least three (3) skilled engineers, who should be paid not less than from \$1,600 to \$2,000 per year each. The demands upon this Bureau today for work of a highly technical nature are becoming greater and greater, and immediate arrangements should be made to provide a skilled technical force.

Revision of Positions.

Permit me to call attention to the positions of manager, first assistant manager, and second assistant manager, the titles of which are misnomers.

I recommend the position of manager be changed to that of Superintendent of Underground Construction; the position of first assistant manager be changed to that of Superintendent of Arc Lighting, and the position of second assistant manager be changed to that of Superintendent of Installation of Instruments in Police and Fire Houses. These are their duties, and the titles should be changed to conform to the same.

Installation of New Elevators.

I desire again to call your attention to the absolute necessity of the installation of a new system of elevators in this building. I have referred to this matter in a number of reports I have made. There is nothing more essential than transportation between the various floors of this building, and the safety of the passengers who ride on these elevators, than that to make immediate arrangements for the necessary appropriation to carry this into effect.

Inspectors for Fire Alarm Boxes.

We have installed on the highways of this City covering a territory approximately one hundred and twenty-nine (129) square miles, one thousand eight hundred and sixty-two (1,862) fire signal boxes. Our method of inspection today is most imperfect for the reason that with the limited inspection force at our disposal it requires approximately three (3) months to inspect the fire signal boxes referred to. In order to maintain the efficiency of your fire signal service it is absolutely essential that weekly inspections should be made of every fire signal box in the City of Philadelphia.

I recommend that immediate arrangements be made to provide five (5) inspectors, whose duty it will be to keep constant watch and inspection of these signal boxes, so that we may know that every one of them is in proper condition to be called upon to perform the service for which it was installed. This cannot be done at the present time.

Inspectors for Picture Show Parlors and Theatres.

I also desire to call your attention to the fact that repeated demands have been made for inspectors for picture show parlors and theatres. We have at our disposal only

two men to cover this important work, and I sincerely hope that we will not need an object lesson before provision is made for the inspectors referred to. We should have at least five (5) more inspectors to constantly watch these places and inspect also, in connection with picture show parlors and theatres, the condition of electric signs that are being constantly erected all over the City.

I take the liberty of quoting you an editorial published in the *Electrical Review* and *Western Electrician*, issue of February 25, 1911, under the heading, "Fire Hazard of Electric Signs:"

Fire Hazard of Electric Signs.

"In erecting electric signs upon or adjacent to buildings, care should be taken to see that no wood-work or other inflammable material is sufficiently near to the lamps to be unduly heated. Neglect of this simple precaution will largely increase the risk of fire from this source. Careful attention should also be given to the proper support of large signs, especially where these are exposed to the wind, and it should also be seen to that in case the sign should by any means become loosened it would not fall upon the street or upon adjacent buildings. Such a contingency may easily arise from fire originated by other sources. Switches should be placed in accessible positions, so that power may be cut off whenever desired, not only by those in charge of the sign, but firemen or others who may have occasion to go on the roof.

"The necessity for careful attention to these matters by those responsible for the construction and those interested commercially in electric signs is made all the more urgent in view of the campaign which is under way among the fire underwriters to limit or

possibly suppress the use of electric signs for advertising purposes. In combating this movement the position of sign users should be impregnable, and this will only be the case if they give proper regard to those considerations which to the fire insurance companies and to the City Fire Departments seem important."

Installation of Fire Alarm Signal Boxes and Patrol Boxes.

We are badly in need of at least two hundred (200) fire signal boxes and two hundred (200) modern Electrical Bureau type patrol boxes. There are at the present time eighty-two (82) of the old-fashioned sheet-iron patrol booths in different parts of the City that are falling to pieces. It is the desire of the undersigned to remove these booths and modernize by the installation of new patrol boxes.

Rewiring of City Hall.

I desire to call your attention again to the necessity of providing the necessary funds to commence the rewiring of City Hall. This is absolutely necessary on account of the repeated demands for service in the various rooms in the building.

Placing All Police and Fire Alarm Wires Underground.

Again I call your attention to the fact that approximately seventy-five per cent. (75%) of our police and fire alarm wires are overhead. This is serious condition of affairs. Every storm that we have causes no end of trouble, and it is extremely hard at times to maintain this most important service. Arrangements should be made this year at least to commence the placing of these wires underground.

Boiler Plant in City Hall.

In view of the fact that it is necessary at times to clean and repair some of the boilers in the City Hall plant, it is absolutely essential that we should have an increase in the boiler capacity of this building to the extent of 300 H. P. for the purpose of taking care of break downs.

What has been done by this Bureau during the year 1910—in fact, ever since I have had the honor to be its Chief—has been due to the earnest support that you have given me at all times, and, believe me, it is appreciated more than you can imagine, and it is just such support given to heads of Departments and Bureaus that gives them encouragement and spurs them on to greater effort.

Permit me to extend my thanks to His Honor the Mayor for the splendid manner in which he has carefully considered matters coming under the supervision of this Bureau; his support has been all that could be desired.

I also desire to extend my thanks to the members of Select and Common Councils, and to the Presidents of both branches. It is a source of great satisfaction to me to know that there is such a splendid feeling of harmony existing between this Bureau and every member of the legislative branch of the City Government, and it will be the earnest effort of the undersigned to see that this feeling is always maintained. I very much appreciate the many visits to me during the year by members of both branches of Councils and the Presidents of the same at my office, and I believe they have been interested in the work that has been done and is now under way.

In conclusion, let me beg of you to earnestly forward all the recommendations that I have made, and I again desire to extend to you my thanks for the able manner in which you have supported me in every humble effort that I have made in connection with the work of this important

Bureau. You can rest assured that always the best that is in me shall be given, not only to maintain, but to increase the efficiency of your administration through this Bureau.

I cannot close my report without an expression of thanks to the subordinates of the Bureau for the very hearty and splendid manner in which they have supported me in my work; believe me, sir, it has been at times hard, but when you are supported and surrounded by enthusiastic employees, who are constantly seeing things done, and are always willing to look forward to better things in connection with the work of the Bureau, it inspires one to greater effort. The esprit de corps still continues in this Bureau, and the splendid feeling shown by the employees is admirable.

Respectfully submitted,

J. F. McLAUGHLIN,
Chief of Bureau.

ACCOMPLISHMENTS OF THIS BUREAU

FROM APRIL 1, 1907 TO DECEMBER 31, 1910.

Under date of October 13, 1910, I received a communication from you, requesting me to furnish you with a condensed list of the accomplishments of this Bureau from April 1, 1907, to December 31, 1910, which I take the liberty of making part of my report.

Accomplishments of the Electrical Bureau During the Administration of the Honorable John E. Reyburn, Mayor, to December 31, 1910.

When the undersigned took charge of this Bureau, it was found that a number of telegraph companies had not been paying their taxes and license charges for approximately twenty-four (24) years, being indebted to the City to the amount of \$97,351.50. Arrangements were immediately made to proceed to collect this money from these companies; after many negotiations, a settlement was arrived at between all the companies and the City which was satisfactory to the City, and the settlement was authorized by Select and Common Councils, the money being collected and turned over to the Receiver of Taxes.

Reorganization of the Bureau.

The entire Bureau from the "labor roll" up has been completely reorganized and placed upon a strictly business basis. The office hours are from 8 o'clock A. M. until 4 o'clock P. M. Business management, such as you find in

private corporations, is applied to every branch of the business done by this Bureau, and you will find among all the employees a cheerfulness and willingness to comply with every request that is made them in the prosecution of the business. I feel that we have proven beyond question that a public office can be operated on a strictly business basis.

Municipal Telephone Exchange.

It was also found that this Bureau had one of the most antiquated systems of telephone exchanges that could scarcely be found in a country town. Realizing the importance of a modern and up-to-date Municipal Exchange, the undersigned proceeded to negotiate with the Bell and Keystone Telephone Companies for the installation of what is today beyond question the most modern municipal telephone exchange in the world. The plans and specifications for this exchange were laid down by this Bureau and installed under the supervision of the same by the Bell and Keystone Telephone Companies without any cost whatever to the City of Philadelphia. The cost of installing this Municipal Exchange was approximately \$80,000, divided between both telephone companies. It has been visited by thousand of people from various parts of the country and many experts familiar with this class of work, and, I believe, has been adopted by several American municipalities and some foreign cities. It consists of one (1) 4,000 wire main terminal and protector frame of absolute fireproof construction; two (2) of the most modern telephone switchboards, both Bell and Keystone. The Bell board has a capacity of five hundred (500) lines, and one hundred (100) special trunk lines, running from the Municipal Exchange in this building to the Bell Telephone Company's Exchange, for the purpose of taking care of outside calls. The Keystone board has a capacity of four hundred (400)

lines, with fifty (50) special trunk lines, running from this exchange to the Keystone Telephone Company's Exchange, for the purpose of taking care of outside calls.

There has also been installed in the same room a complete storage battery plant, which distributes the necessary current for the complete operation of the system throughout the City, together with relay racks, modern and up-to-date intermediate distributing frames, and a large number of repeating coils. The City of Philadelphia has every reason to be proud of, as we of the Electrical Bureau are, of this modern scheme of intercommunication.

A Police Telephone Exchange.

It was also found that telegraphic communications were being made through the Department of Public Safety, covering the Detective Bureau, Police Department and Police Stations by the most unique, and still at the same time the most antique method of telegraph that has ever come under the notice of the undersigned, viz.: the old system of "dial telegraph," which was as slow as molasses in the winter time. Arrangements were immediately proceeded with to remove this scheme of communicating and to substitute therefor what is recognized throughout the country and abroad as the most modern and the most original method of communicating important messages through your Police Department that has been installed and operated in any city in the world. It consists of the introduction of what is "technically" called "Simultaneous Telephony." Installed in every police district is a police telephone system, each operator taking his messages down from the Central Office and transcribing the same on typewriters, keeping triplicate copies of each and every message that is sent. One message can be sent to a separate district, or a number of messages can be sent to all the districts at the same time.

To illustrate how perfect and valuable this system is, during the year 1909 there were transmitted over these lines seven hundred and sixty-two thousand five hundred and seventy-five (762,575) messages, triplicate copies of every one of them being kept, the messages averaging all the way from ten (10) to two hundred and fifty (250) words without a solitary mistake being made. This system is operated through a separate and distinct exchange in this building, called the "Police Telephone Exchange," operated by sworn operators. This system was also installed in the building here in room 629 without any cost whatever to the City of Philadelphia, after much negotiation with both telephone companies. The introduction of this system into the police district has, beyond question, raised the standard of efficiency of the house sergeants, many of whom today are expert typewriters. In this room are located what is technically termed a two (2) position common battery, lamp signal Bell Telephone switchboard, having a capacity of one hundred (100) lines, and fifteen (15) special trunks. A two (2) position common battery, lamp and drop signal Keystone switchboard, on the Keystone system having a capacity of eighty (80) lines and ten (10) special trunks.

In connection with this a two party telephone system has also been designed and developed, whereby no one can interfere on the line in case a conversation is being carried on, making it physically impossible to hear any conversation that may take place between both ends of the line. This, I believe, is the only system of absolute secret communication that has been devised, and will be of incalculable value in police districts.

The police telephone room is used exclusively for "police business" and nothing else.

Pawnbrokers' 'Phones.

There has also been installed in this room a system that the City of Philadelphia originated, and which has proven one of the most valuable things that has been done during this administration; I refer to the system by which every pawnbroker in the City of Philadelphia is connected directly by private line with the police telephone room, at no expense to the City—all the expense of the installation, maintenance, rental, etc., being born by the pawnbrokers. The exchange system has a capacity of one hundred and twenty (120) lines. To illustrate the great value of this system and what it has been—on the third day after it was completed and put in operation there was \$16,000 worth of valuables recovered by the Detective Bureau by being notified by one of the pawnbrokers that there were suspicious characters in his office, he having immediately notified the Detective Bureau, who proceeded to his office and made a very important capture; this has occurred a great number of times since the installation of the Pawnbrokers' System, which was completed and "cut into service" on January 31, 1910.

Electrical Bureau Laboratory.

There was installed in the year 1908 a thoroughly equipped and up-to-date Electrical Testing Laboratory in room 634, City Hall. In this laboratory are the most accurate instruments for making all kinds of electrical tests and measurements. This laboratory has proved of incalculable value and assistance, not only to this Bureau and the various Departments in the City, but to the students of the colleges in this vicinity and of the Manual Training, Trade and High Schools.

To illustrate the value of this laboratory. The first test

made in this laboratory by this Bureau of a large amount of material that was under contract, it was found that the same was not up to the requirements, the result of which was that the material was rejected, and the allowance insisted upon by the undersigned to be made to the City of Philadelphia was enough to pay for the entire cost of the installation of this laboratory. Tests of every description are constantly being made and accurate records kept on file.

Electrolytic Surveys.

During 1907 and 1908 another very important thing was taken up by this Bureau that has proved of great value. I refer to a long series of tests in connection with "electrolysis" in connection with the water mains throughout the entire City, every inch of water main in the City of Philadelphia being thoroughly tested, and where found necessary were protected by modern methods, and I question whether there is a city anywhere that is more free from electrolytic action, owing to leaking currents, than the City of Philadelphia. Tests are constantly being made and accurate records being kept of every one of them. Much assistance was given to the undersigned by the Chief of the Bureau of Water in connection with this most important matter. These tests were made at the request of Director of Public Safety Henry Clay, Esq., upon a request made to him by the Director of Public Works shortly after the undersigned was sworn into office.

Generating Current for Police Stations by Motor Generators and Dynamotors.

Upon investigation it was found that the various police districts were using for the maintenance of their system of communication the old method of blue stone batteries, which were extremely cumbersome, hard and expensive to

maintain, entailing much work upon the house sergeants. This Bureau proceeded to design a more modern scheme of furnishing the necessary current for operation in connection with the police districts, the result of which was the designing of the dynamotors that are used in the direct current districts of the City, and motor generator sets that are used in the alternating current districts of the City. This apparatus occupies a space of about two feet square, and the old-fashioned method of blue stone batteries required a large room. This modern apparatus is now installed in the Fifth Police District, Eighth Police District, Twelfth Police District, Nineteenth Police District, Twentieth Police District, Twenty-first Police District, Twenty-fourth Police District, and Thirty-fifth Police District, and in the latter part of 1911 it is expected that every police district in the City of Philadelphia will be equipped with this modern apparatus. Each system is in "duplicate," making it physically impossible for the service at any time to be interfered with, and the introduction of the same being comparatively inexpensive, it costing but approximately \$50 for each district

Lectures.

In 1908 and 1909 there was inaugurated a course of Practical Instructions and Lectures to the School Boys, which has proved of great value, many of the students from the Manual Training, Trades and High Schools being in attendance at no expense whatever to them. This is susceptible of great development, and plans are now being laid by the undersigned to enlarge and make more thorough these practical talks. The course proved so valuable and interesting as to attract the attention of the honorable members of both Common and Select Councils, who were good enough to make an appropriation in 1909 for the payment

of ten (10) apprentices, who were appointed and are now under instructions, doing practical work in the various branches coming under the supervision of this Bureau.

Method of Keeping Accounts.

There has also been introduced a most complete system of not only keeping accounts, but a record covering the installation of every electric arc light in the City of Philadelphia; also a card index record of all employees of the Bureau, and of the various electrical services, both overhead and underground, including cables, etc., so that at a moment's notice any information desired can be obtained through this great index system.

In combination with this the Bureau has installed a modern and up-to-date system of accounting, using double entry bookkeeping throughout, and the job slip system being kept, which includes a record of everything done by the employees, no matter how trifling, the same being entered up, the time required to do the job, the amount of material required and the cost of the same, and the name of the employee who did the work.

A monthly balance sheet is furnished regularly to His Honor the Mayor, the Director of Public Safety, and the Finance Committee of Councils, showing the conditions of the various items covered by the appropriation made to this Bureau, and I believe this is the only Bureau in the City that makes such a statement. The result of a monthly balance sheet like this being furnished to the parties referred to shows twelve times a year the exact condition of the finances of the Bureau. The value of this method of accounting that we have in this Bureau is shown from the fact that this Bureau in striking its last balance sheet of the year on December 31st always turns back a surplus over and above the cost of the operations of the Bureau for the year.

Balance Sheet as of December 31, 1910.

After paying all bills for the purchase of supplies, labor, etc., this Bureau has turned back into the City Treasury the sum of	\$35,789 04
and (Department of Supplies)	2,085 52
making a surplus of	<u>\$37,874 56</u>

above all the requirements for the year 1910. We commence the new year without owing a dollar.

Salary Requirements.

The salary requirements of the Bureau for the year 1910 are	\$113,734 50
we have earned	<u>128,323 67</u>
this is	\$14,589 17

above the requirements of the Bureau for all salaries. It shows that so far as the salary requirements of this Bureau are concerned we are self-sustaining.

High Pressure Signal System.

There has also been designed by this Bureau a Combination High Pressure Fire Water Main Telephone and Fire Box, which is now being installed as rapidly as possible. This consists of a system of telephonic communication between any one of these boxes and City Hall and the High Pressure Pumping Station at Seventh street and Lehigh avenue that is now nearing completion. There are now one hundred and forty (140) of these signal boxes being erected, making it possible for the Chief Engineer, Assistant Engineers, or any member of the Fire or Police Department to talk from one of these signal stations on the curb line to any part of the City.

Designing the New Scheme of Illumination for the High Pressure Pumping Station at Seventh Street and Lehigh Avenue.

There has also been designed by this Bureau in connection with the High Pressure Pumping Station a very unique scheme of illumination, plans and specifications of which have been made by this Bureau. The fixtures in connection with this scheme of illumination will be installed by the latter part of this year. I desire to call your attention to the fact that all the electrical work in connection with this building was done by employees of this Bureau, and will bear the closest inspection that can be made.

Electrical Method of Control of the Apparatus at the High Pressure Pumping Station, Seventh Street and Lehigh Avenue.

There has been installed in this building a very unique and at the same time a very interesting scheme of controlling the apparatus from one central point, each unit being controlled by electrically operated motor valves, the same being as near automatic as it is possible to make. This entire equipment has been installed under the supervision of this Bureau.

Fire Signal Boxes.

We have remodeled 100 of the old style fire signal boxes at a cost of \$28.75 each, as against the cost of \$125 each for new ones, which shows a saving of \$96.25 on each box, making a total saving to the City on this account of \$9,625. This development commenced in April, 1908, and it also included the complete redesigning and modernizing of what is technically called "the Electrical Bureau Type Patrol Box and the Electrical Bureau Type Fire Signal Box."

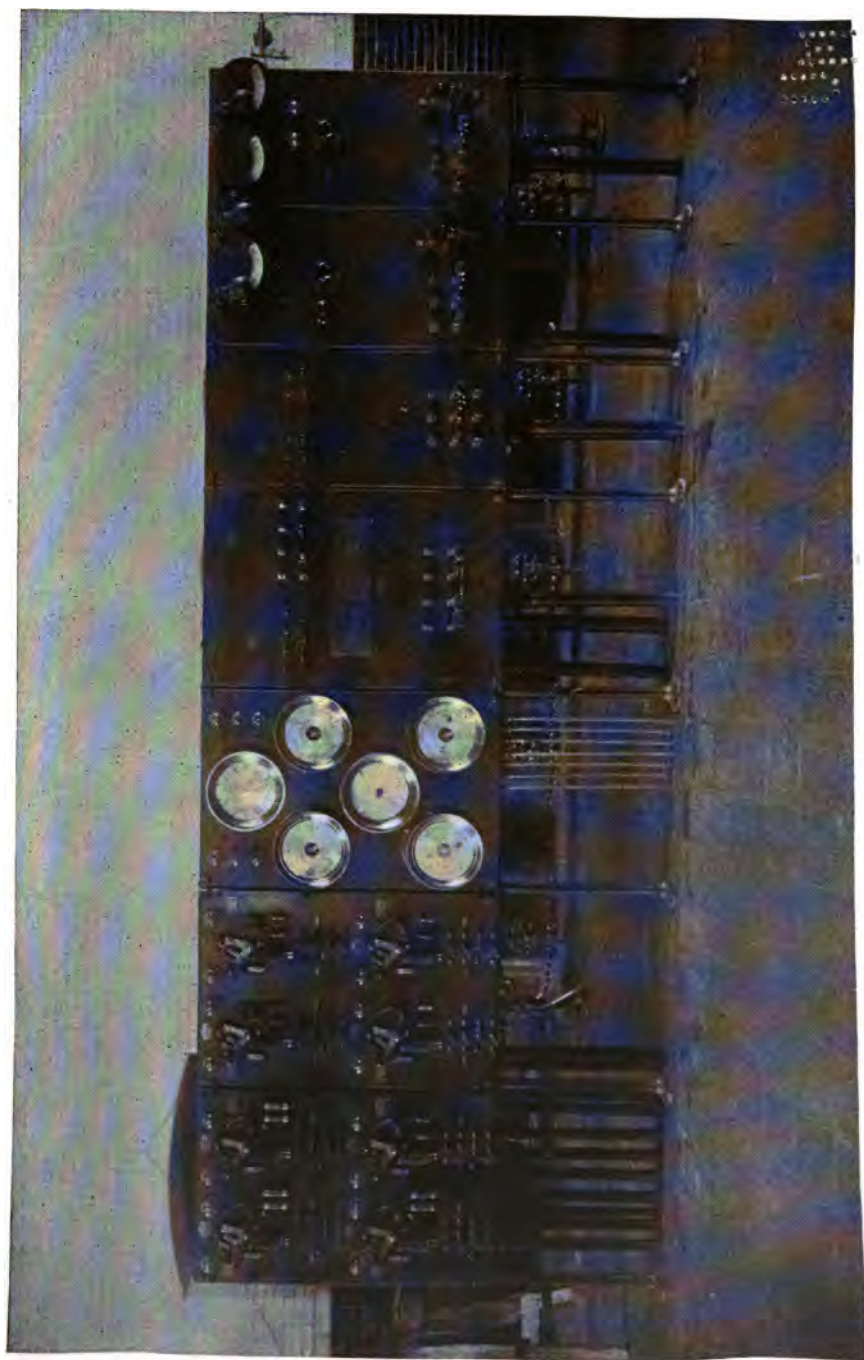


ENGINE AND PUMP ROOM AT HIGH-PRESSURE PUMPING STATION, SEVENTH AND LEHIGH AVENUE



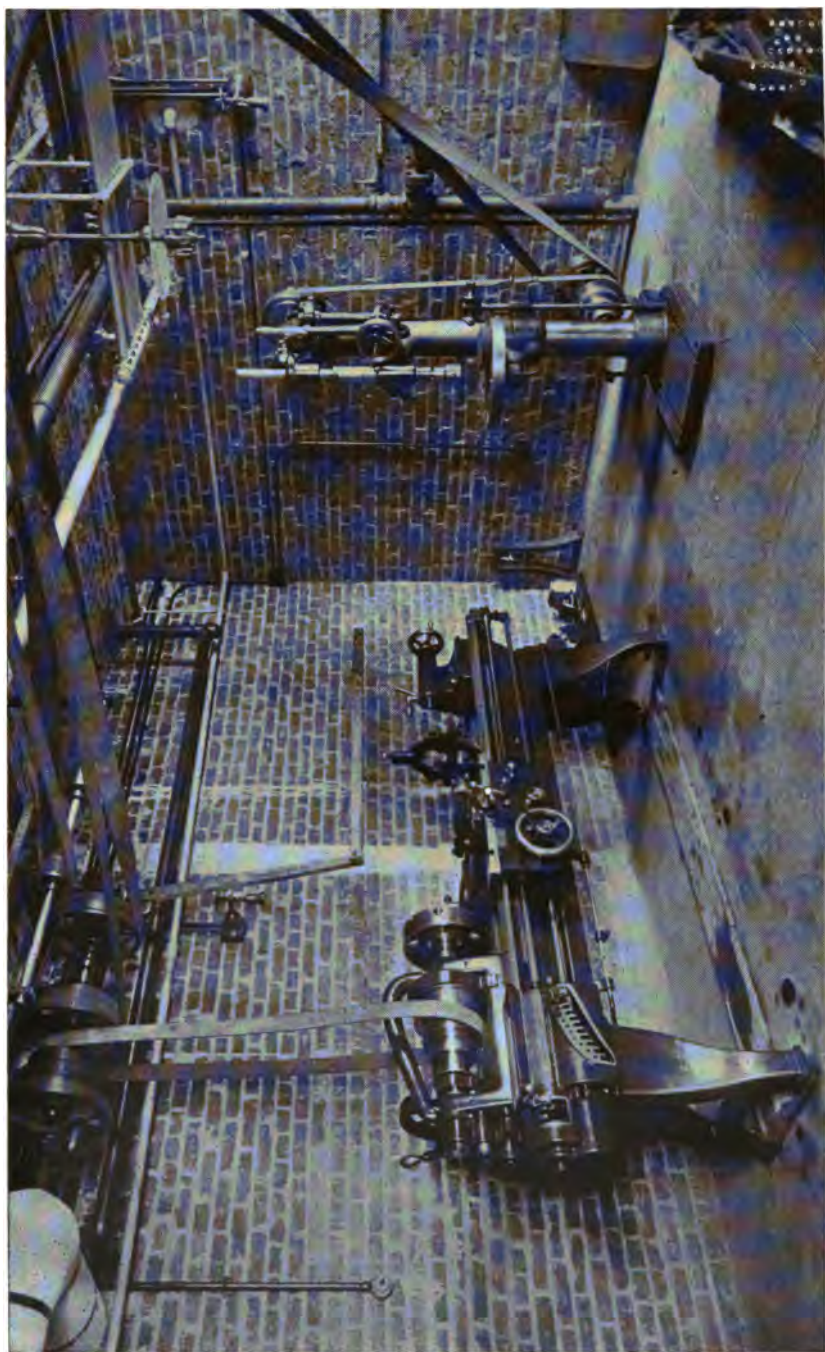
ENGINE AND PUMP ROOM AT HIGH-PRESSURE PUMPING STATION, SEVENTH AND LEHIGH AVENUE

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POWER AND LIGHTING SWITCHBOARD AT HIGH PRESSURE PUMPING STATION, SEVENTH STREET AND LEHIGH AVENUE.





CORNER OF MACHINE SHOP AT HIGH PRESSURE PUMPING STATION, SEVENTH STREET AND LEHIGH AVENUE.

2

It is found that there is approximately three thousand (3,000) cells of storage battery in this building for the purpose of operating the fire signal circuits throughout the City. Recognizing the fact that this was cumbersome and must be modernized, a plan has been arranged and worked out, so that the fire signal system is now being operated from the electrical current generated in the power plant in this building instead of the storage battery. Arrangements are now being made to complete this system, which will eliminate the cost of the maintenance of the three thousand (3,000) cells of storage battery referred to.

Memorial Lamps.

I desire to call your attention to one of the most interesting and at the same time one of the most valuable, and, I believe, one of the most pleasing accomplishments to the citizens of this great City that has been completed by this Bureau. I refer to the designing and the erection of the Memorial Lamp Posts, which were placed in position during Founders' Week, in October, 1908, around City Hall, where the complete history of our City prior to the consolidation can be found memorialized by a full and complete description on bronze tablets.

I desire to say in connection with the erection of these Memorial Lamps that the original thought was immediately approved by yourself. The suggestion of erecting twenty-eight (28) Memorial Lamp Poles around City Hall, each emblematic of one of the original twenty-eight (28) districts surrounding the original City of Philadelphia, followed a plan which the Founders' Week Committee had of erecting a court of honor in plaster. Knowing your own ideas against any temporary improvement, this thought was given to you through Henry Clay, Esq., Director Department of Public Safety, and your directions to me were to immediately plan a design for the respective lamp posts.

The carrying of your thought into final arrangements was immediately made by this Bureau, and the erection of those beautiful lamp standards, so pleasing to the eye, and so sentimental in character, is due absolutely to you in indorsing what will be forever a feature of the City of Philadelphia.

Knowing your interest in the successful Founders' Week, and watching your constant efforts to make it an unparalleled success in every particular, and knowing also that you gave the privilege of bringing to a close the ceremonies incident to the 225th anniversary of the founding of the City to the Knights Templar of Pennsylvania, I had caused to be made with your permission a Knight's Templar design, showing the cross and crown in colored lights. At 11 o'clock on the last day of the celebration, when the Knights Templar, in conjunction with yourself and other distinguished visitors, stood in the rain at the north entrance to the City Hall and formally brought to a close the week's celebration by extinguishing all the lights on the City Hall, there appeared in view this set piece, forming in itself a fitting climax to the celebration of which you were the actual head and most interested worker.

In connection with the thought of erecting twenty-eight (28) lamps I had also caused to be designed a large bronze tablet, which was erected on the wall of the corridor outside of the Mayor's office, which bore the boundaries of the original City of Philadelphia as laid out by William Penn, viz.: From Vine to South streets, and between the two rivers. On this tablet should appear by all means the names of the officials of the City under that date, 1908.

This tablet is a memorial to the old City as laid out by William Penn, and the twenty-eight lamp posts are memorials to the twenty-eight (28) districts which were consolidated with the original City under date of 1854.



INDIRECT ILLUMINATION UNDER GALLERIES OF COMMON COUNCIL CHAMBERS.



I desire to say further, in connection with the erection of these lamp standards, that one of the most pleasing things in connection therewith was the christening of these poles by school children from the various schools of the City. This thought was suggested to the undersigned by Mr. William J. Milligan, Chief Clerk Select Council, and it appealed to me so strongly that arrangements were immediately made with the Board of Public Education for the purpose of arranging the school children from the various sections of the City, represented by the townships and boroughs referred to, to christen the respective poles, the ceremonies of which were not only very impressive, but extremely instructive as well. They are now here as a lasting monument and are much admired by and have proven extremely instructive to visitors.

The illumination of Select and Common Councils' chambers and the Finance Committee's room was designed and completed by this Bureau.

This Bureau also, under ordinance of Councils of April 15, 1908, examines all applicants throughout the City for the operation of passenger elevators.

Moving Picture Show Parlors.

This Bureau also, under ordinance of Councils of February 25, 1908, examines all operators of moving picture machines in connection with the operation of moving picture show parlors.

This Bureau has also assumed charge of the inspection of moving picture show parlors, and all places of public amusement, including theatres, etc.

This Bureau has also control of all the electrical installations under contract by the municipal departments, such as public school buildings, public libraries, electrically operated drawbridges, municipal hospital, etc.

I would respectfully call your attention to the illumination of the William Penn High School for Girls, all of which was supervised by this Bureau.

Electrical Installations in Police Stations.

The making of plans and specifications for the electric lighting of the various police and fire stations, bathhouses and other City buildings are made by this Bureau. They were formerly done by contract; all the work is now done by this Bureau, who make the complete installations. The list of buildings in which we have erected and installed installations of this character follows:

Ninth District Police Station and Garage.
 Twenty-third District Police Station and Garage.
 Twenty-first District Police Station and Garage.
 Thirty-fifth District Police Station and Garage.
 Thirty-sixth District Police Station and Garage.
 Twenty-fourth District Police Station and Garage and Stable.
 Eighth District Police Station and Garage.
 Fourth District Police Station and Garage.
 Twelfth District Police Station.
 Engine Company No. 31 Fire House.
 Engine Company No. 44 Fire House and Storage House.
 Engine Company No. 55 Fire House.
 Engine Company No. 26 Fire House.
 Engine Company No. 28 Fire House.
 Engine Company No. 32 Fire House.
 Truck No. 8
 Truck No. 2.
 Truck No. 5.
 Bathhouse, Twelfth and Reed streets.
 Bathhouse, Front and Thompson streets.
 Bathhouse, Montrose and Darien streets.
 Van Stables, Eleventh and Wharton streets.
 New Traffic Squad Stable, Eleventh and Wharton streets.
 High Pressure Pumping Station, Seventh street and Lehigh avenue.
 Lighting of the Pergolas on the Parkway.
 Lighting of Walnut Lane Bridge.
 Lighting of Forty-second Street Bridge.

Lighting of the City Highways.

I desire to call your attention to the modern illumination of the highways in the central section of the City of Philadelphia. There has been erected during this administration one thousand eight hundred and sixty-nine (1,869) electric arc lights.

The new system of illumination covered by the erection of the ornamental standards on Market street, Chestnut street, Walnut street, Arch street and Broad street includes nine hundred and fifteen (915) electric arc lamps.

The installation of this scheme of illumination has beyond question completely transformed the center of the City of Philadelphia, and it is absolutely safe to say, without fear of contradiction, that we have the most modern and best lighted city in the world.

When you consider the vast territory that the great City of Philadelphia covers, and the number of lamps that we have on the highways, based upon a population of 1,600,000 persons, the cost of lighting is not great, as it averages but eighty-one (81) cents per capita per year per light, and but two and $\frac{2}{10}$ (2.2) mills per capita per light per night.

Much has been said by the press and others in connection with this scheme of illumination, all of which has been extremely favorable, and I know of nothing that has been done during this administration that reflects so much credit upon it as the introduction of this splendid scheme of illumination which has been carefully and scientifically worked out in every detail.

Southern Boulevard Lighting.

Plans and specifications have been completed for the proposed illumination of the new Southern Boulevard and League Island Park by what is technically known as the

"Series Tungsten System" of lighting. This differs radically from the scheme of illumination above referred to, as instead of using electric arc lights, incandescent lamps of high candle power are to be used mounted upon ornamental standards.

Illuminating the Grounds of the Philadelphia Hospital for Contagious Diseases.

There is now being installed in the grounds of the Philadelphia Hospital for Contagious Diseases, at Second and Luzerne streets, at the request of Dr. Joseph S. Neff, Director of the Department of Public Health and Charities, a modern scheme of illumination, plans of which have been laid down by this Bureau and the work done by its employees. It is expected to have this completed by the end of the year. Series Tungsten lighting will be used throughout.

Independence Square.

Plans and specifications have also been completed for the erection, at the request of his Honor the Mayor, of fifty-six (56) ornamental lamp standards surrounding Independence Hall and in Independence Park, memorializing each and every signer of the Declaration of Independence. The model of this standard will be completed within the next few days. Had it not been for litigation now pending this whole scheme of illumination in connection with Independence Hall would have been opened up on New Year's Eve, but under the circumstances it will have to be delayed.

Rehabilitation of the Fire Alarm Equipment.

Plans and specifications have been prepared for the complete rehabilitation of the fire alarm equipment in City Hall, commonly called Central Office, which is the point

of distribution in this building. These plans cover the installation of the most modern apparatus for handling fire alarm signals, and also the construction of a room that is absolutely fireproof in every particular, in which this equipment will be maintained. It also means the removal from this Bureau of 3,300 cells of storage battery that have been used for years to handle your fire alarm equipment.

Police and Fire Alarm Wires to be Placed Underground.

In view of the fact that approximately seventy-five per cent. (75%) of the important police and fire alarm wires are overhead, plans are well under way preparing for the laying of underground ducts and cables for the purpose of placing these very important services underground. This will minimize many of our troubles due to elemental disturbances and other causes. There should be no time lost in connection with this work.

Police Patrol and Fire Signal Boxes.

The City of Philadelphia has had erected throughout the various parts of the City sheet-iron booths in connection with the police patrol signal boxes on the highways, many of which have fallen to pieces. There have been one hundred and nineteen (119) of these old-fashioned booths removed and replaced by new Electrical Bureau type patrol boxes. There are also twenty-nine (29) of these new patrol boxes in course of erection, making a total of one hundred and forty-eight (148) new Electrical Bureau type patrol boxes now upon the highways.

Electrical Equipment for Police Stations.

A new police patrol telephone stand to be used by the House Sergeants in the various districts has been designed by this Bureau, twelve (12) of which have been ordered

and received, and three (3) of which are already in operation, and the balance will be erected by the latter part of December of this year.

The old chemical registers that have been used for so long a time are being rapidly replaced by a new Electrical Bureau type shearing register which makes a permanent record by cutting into the paper tape instead of transmitting the same as heretofore under the old chemical registers, by which an hour after the call had been made no record appeared. This new register operates in connection with the new patrol box, and registers the call permanently that the patrolman makes from the patrol box in his district. The importance of this can be plainly seen

A system of intercommunicating telephones in place of speaking tubes are being installed in the various police districts, which is very desirable.

There has also been installed one hundred and fifty-nine (159) new Electrical Bureau type fire signal boxes, and forty (40) more are now being installed as rapidly as possible, making a total of one hundred and ninety-nine (199) new Electrical Bureau type fire signal boxes.

There has also been one hundred of the old antiquated type fire signal boxes remodeled to correspond with the new Electrical Bureau type, the same having been installed and are now in operation.

New Police Station Equipment.

There have been erected in a number of Police Districts what are commonly called modern "Protector Boards," displacing the old equipment. They have been installed and connected up with new instruments in the following stations:

Fourth District Station House.

Eighth District Station House.

Ninth District Station House.

Twelfth District Station House.
 Nineteenth District Station House.
 Twenty-first District Station House.
 Twenty-third District Station House.
 Twenty-fourth District Station House.
 Twenty-sixth District Station House.
 Thirty-fifth District Station House.
 Thirty-seventh District Station House.
 Engine Company No. 26.
 Engine Company No. 28.
 Engine Company No. 31.
 Engine Company No. 32.
 Truck No. 2.
 Truck No. 8.

South Broad Street Pole Line.

Investigation made by the undersigned in connection with the City's Police and Fire Alarm line of poles on the east side of Broad street, from Moyamensing avenue to League Island gate (Government avenue) showed the same to be in a dilapidated and disgraceful condition. Realizing the fact that this Bureau had no money at its disposal to rebuild the same and to modernize the equipment by placing it underground, which would cost approximately \$14,500, I proceeded to open negotiations with both the Bell and Keystone Telephone Companies, who have modern ducts and cables along the line on both the east and west sides of Broad street to League Island gate. I finally succeeded in having both companies turn over to this Bureau the necessary cables and conduits at no expense whatever to the City, thereby saving the City of Philadelphia \$14,500. The old pole line has been removed and the service is now underground in a modern and up-to-date manner as above referred to.

Money Collected.

During this Administration this Bureau has collected and turned in to the City Treasury the sum of four hun-

dred and thirty thousand three hundred and thirty (430,330) dollars and sixteen (16) cents for taxes, license charges, etc.

In addition to the above the rental of wires in the City cables has been increased by Ordinance of Councils of October 31, 1908, from ten (10) to thirty (30) dollars per mile.

Electric Signs.

This Bureau has issued one thousand six hundred and ninety-nine (1,699) permits for the erection of electric signs in various parts of the City, keeping correct records as to the number of lamps, candle power of the same, and the design of the signs. There are now burning on these signs approximately one hundred and fifty thousand (150,000) lights, brilliantly illuminating the highways in many parts of the City without any cost whatever to the municipality.

Free Lighting.

In addition to the above, the City of Philadelphia receives, at no expense whatever to it, one hundred and ninety-three (193) electric arc lamps, and the "free" lighting of the various police stations, patrol stations and fire houses, in the "free territory," as required by ordinance of Councils, which, reduced to dollars and cents, means a saving to the City of Philadelphia through this Bureau of seventy-six thousand one hundred and sixty-five (76,165) dollars per year.

Laying of Ducts and Construction of Manholes Along the Northeast Boulevard.

Terra cotta ducts have been purchased and are now on the ground for the purpose of being installed along the

Northeast Boulevard, anticipating the lighting of this boulevard and the connecting up of the police and fire alarm services.

Removal of Poles and Wires.

There has been removed by the Western Union Telegraph Company, after much negotiation between the company and this Bureau, their pole line on North Tenth street, from Market to Sansom street, that was erected by the company during the Centennial Exhibition held in this City in the year 1876. These poles and wires were not only a menace to the general public, but extremely unsightly; they are now removed and the line along this thoroughfare has been placed underground.

Arrangements have been made with the Western Union Telegraph Company for the removal of the pole line on Sansom street, from Sixth to Sixteenth street. The wires and cables that have been maintained on these poles will all be removed and placed underground, at the expense of the Western Union Telegraph Company, by the latter part of this year.

Purchase of Cables, etc.

It was found that there was but practically one bidder who submitted bids for the cable and wire requirements of this Bureau in the annual schedule. Being familiar with the prices of these materials, the bids submitted the first year of my occupancy as Chief of this Bureau led me to believe that a combination in prices existed, and the bids were thrown out, and, at my request, Councils passed a resolution under date of February 11, 1908, authorizing me to go into the open market and purchase the requirements of the Bureau. Plans and specifications were made by this Bureau covering these requirements, bids were taken, and a large number were submitted—in fact, the largest num-

ber of bids covering the requirements of this kind that were ever submitted. The result was a saving of approximately thirty thousand (30,000) dollars on the requirements of this Bureau below the regular schedule prices.

Cable Shaft.

Upon investigation, the undersigned found that the very important wires and cables covering the police and fire alarm and other City services were mounted on structures made of timber in the cable shaft in the northeast corner of City Hall, coming from the underground services to the basement, and from the basement to the timbers referred to. This construction was condemned by the Board of Fire Underwriters and others as an extremely hazardous condition of affairs in connection with these services. Arrangements were immediately made by the Bureau to modernize these very important services, the result being the installation and construction of what is termed the most modern cable shaft of any municipal building in the world. Every cable performing the various services connected with the City Government is now mounted on steel hangers, all the timber being eliminated, and the services from these cables being distributed from floor to floor in this building, making it physically impossible for the services to be ever interfered with by fire or otherwise.

Auxiliary Fire Alarm Company.

It was also found that a company, called the Auxiliary Fire Alarm Company, had been connecting up their services to the fire alarm circuits of the City of Philadelphia, under an ordinance of Councils dated June 3, 1904, for the purpose of attaching their instruments and sending alarms of fire from their subscribers to the City's central office, through which the company received a great revenue

at the expense of the City of Philadelphia. A report of this condition was made to Henry Clay, Esq., Director of the Department of Public Safety, and recommendation made to Councils for the passage of an ordinance whereby the City of Philadelphia would participate in the profits of the business done by this company. This ordinance was passed by Councils and approved by his Honor, the Mayor, on the fifteenth day of November, 1909, and the one passed on June 3, 1904, was repealed. The City now participates in the profits of this company to the extent of several thousand dollars yearly.

Recabling of City Hall.

Arrangements have also been made for the recabling of City Hall and modernizing the wiring equipment in every way. This is also extremely essential, for the reason that many of the circuits in this building are greatly overloaded.

Incandescent Current Used in City Buildings.

Under a Commission appointed by his Honor the Mayor for the purpose of determining the cost of incandescent current furnished to City buildings every year, and of which the Chief of this Bureau is a member, a meeting was held of the entire Commission, consisting of three persons, last February, the result of which was that the price of current to be used in City buildings was reduced from $7\frac{1}{2}$ cents per kilowatt hour to 6 cents per kilowatt hour, which means a saving to the City of Philadelphia of several thousands of dollars per year.

Removal of Wires.

During the year 1910 there was removed by the employees of this Bureau approximately fifty (50) miles of overhead wire and cables that were illegally erected.

In addition to this, the City removed one hundred and twenty-five (125) miles of wire, which was the property of the City.

There has also been removed by the various companies coming under the supervision of this Bureau two thousand (2,000) miles of wire and twenty-six hundred (2,600) miles of wires in cables from overhead and the same placed underground.

Another very important accomplishment of this Bureau was the installing of your police and fire services underground covering the congested district, viz.: the district covering the principal hotels, theatres, hospitals, etc., which had been formerly overhead.

Emergency Calls.

It was found that the question of making "emergency" calls for police and fire purposes, etc., over the wires of the telephone companies was a serious one, the undersigned taking the stand that any citizen "had the right to make an emergency call" for these particular purposes without any cost whatever. After much negotiation with the Bell Telephone Company, their officers took a broad and liberal view of the situation after my explanation of the matter, and decided to set aside a number of special trunk lines between their exchanges and the Municipal Exchange in this building for the express purpose of handling "emergency" calls that would not be interfered with in the prosecution of their regular business. It is now possible for citizens to make an "emergency" call for police, fire or ambulance service without any delay or cost to them by simply calling "Spruce 20," as indicated in the catalogue of the Bell Telephone Company. The value of this agreement can be seen when you realize that it reaches approximately two hundred thousand (200,000) sub-

scribers, who have the right to use the telephones for the purpose of making "emergency" calls at any time without cost.

Elevator Licenses.

This Bureau has examined and passed upon two thousand seven hundred and forty-four (2,744) applicants for licenses to operate passenger elevators. Those successfully passing the examination are so certified to the Director of the Department of Public Safety, who issues licenses to them, the amount of money turned into the City Treasury on this account to date being \$2,317. Chief Clark, of the Bureau of Building Inspection, and Chief Lukens, of the Bureau of Boiler Inspection, are members of this Examining Board.

Moving Picture Parlors.

This Bureau also examines and passes upon all applications for licenses for the operation of moving picture machines. We have examined up to date five hundred and ninety-four (594) operators, the total amount of money turned into the City Treasury on account of the licensing of these picture show parlors and operators being thirty-seven thousand three hundred and thirty-five (37,335) dollars. Fire Marshal Lattimer is a member of this Examining Board. The part taken by this Bureau in connection with the examination above referred to is an important one.

Terminal or Distribution Boxes Installed in City Hall.

There has been installed in the various rooms of this building a new method of distribution of the various wires covering the calling, electric light and telephone services. This consists of a very unique terminal or distribution

box which was especially designed by this Bureau. From these distribution boxes are distributed the various wires of the services referred to.

Steel Tubing.

There has also been installed, to operate in conjunction with the distribution boxes referred to, 18,000 feet of steel tubing, which has been imbedded in the floors and walls of the various rooms of this building, thus bringing the equipment up to modern engineering methods.

Installation of Modern and Up-to-date Elevators.

Plans and specifications have also been made for the installation of a modern and up-to-date system of elevators in City Hall, which is absolutely essential.

Founders' Week.

The part this Bureau took in connection with the work during Founders' Week I will not comment upon, as it speaks for itself.

Illumination of William Penn Statue.

One very interesting and successful experiment that was made by this Bureau during New Year's Eve of 1907 was the illumination of the William Penn Statue on the top of this building, which has been favorably commented upon by not only the citizens of this great City, but by engineers and experts all over the world.

A permanent plan has been laid down for illuminating this statue every night of the week. It only remains for the proper appropriation to be made to carry this most interesting scheme of illumination into effect.

New Scheme of Illumination for Carroll Park, at Fifty-eighth Street and Girard Avenue.

A new scheme of illumination, technically called the "Series Tungsten System," has been planned by this Bureau in connection with the illumination of Carroll Park, at Fifty-eighth street and Girard avenue. There will be installed twenty (20) ornamental poles, each twelve feet high; on top of each will be a 16-inch white globe, covering a 40-watt Series Tungsten lamp. This will give a beautiful effect in the park.

Arrangements will be completed by the latter part of this year for a duplication of this system in Durham Park, and also in the park at Twenty-second and Lehigh avenue. This scheme of illumination of the public parks is a very unique one, and, at the same time, very inexpensive.

LIST OF BELL TELEPHONES.

Select Council.

President's residence, 1537 South Fifth street.....	2
Chief Clerk's office, 404 City Hall.....	1
Chief Clerk's residence, 2138 Fitzwater street.....	1
Clerk's office, 406 City Hall	1
Stenographer's office, 411 City Hall.....	1
Residence of Chairman of Electrical Committee, 1930 North Franklin street	2
Residence of Chairman of Sub-Finance Committee, 3315 North Park avenue	1
Residence of Edw. Buchholz, 1937 North Sixth street.....	1
Committee room, 508 City Hall.....	1
Residence of Mr. Ransley, 1120 South Tenth street	1
President's office, 408 City Hall	1
Residence of Morris Rosenberg, 716 North Franklin street....	1
Residence of Henry R. Shoch, 1503 North Sixteenth street.....	1
Residence of Sergeant-at-Arms, 1426 Arch street.....	1

Common Council.

President, 490 City Hall	1
Chief Clerk, 492 City Hall	1
Chief Clerk's residence, 1841 North Eleventh street.....	1
Residence of Clerk to Highway Committee, 4135 Westminster avenue	1
Residence of Clerk to Finance Committee, 2139 South Fifteenth street	1
Residence of Sergeant-at-Arms, 2010 Pine street.....	1
Clerks, 495 City Hall	1
Chairman Finance Committee, 590 City Hall.....	1
Residence of J. R. C. McAllister, 410 Dickinson street	1
Residence of Dr. Morton, 1453 North Tenth street.....	2
Highway and Survey Committee, 497 City Hall.....	1
Committee room, 592 City Hall	1
Residence of Dwight D. Fuller, M. D., 208 North Thirty-fourth street	1
Residence of William E. Finley, 2005 South Fourth street.....	1
Residence of Geo. Van Houten, 28 South Thirty-fourth street...	1
George H. Kelly's residence, 1633 South Broad street.....	1
Residence of Charles E. Connell, 4602 Kingsessing avenue.....	1

Mayor's Office.

Residence of Mayor, Nineteenth and Spring Garden streets....	3
Secretary, 204 City Hall	1
Chief Clerk, 205 City Hall.....	1
Residence of Chief Clerk, 2053 North Thirteenth street.....	2
Residence of Statistician, 600 North Sixty-third street.....	1
Clerks, 203 City Hall	1
Residence of Messenger, 1403 North Mervine street	1
Clerks, 204 City Hall	1
Residence of Secretary, 117 South Thirty-fourth street.....	1
Statistician, 203 City Hall	1

Department of Wharves, Docks and Ferries.

Acting Director, Room 555, Bourse	1
Rooms 552, 553, 554, 590, Bourse	4
Vine Street Wharf	1

Department of Public Safety.

Residence of Director, 918 North Fifth street.....	2
Assistant Director, 215 City Hall.....	1
Residence of Assistant Director, 831 North Fifth street.....	2
Secretary, 219 City Hall.....	2
Residence of Secretary, 5115 Knox street.....	2
Detectives, 507 City Hall.....	1
Photographer, 734 City Hall.....	1
Photographer, 731 City Hall.....	1
Residence of Veterinary Surgeon, 3020 Chestnut street.....	1
Philadelphia Ball Park, Fifteenth and Huntingdon streets....	1
Shibe Park, Twenty-first and Lehigh avenue.....	1
Messenger to Director, 217 City Hall	1
Morris Refuge, 1242 Lombard street	1
Residence of Secretary, Assistant to Superintendent of Police, 4669 Franklin street	1
Headquarters of State Constabulary, 1529 Walnut street.....	1

Bureau of Police.

Residence of Superintendent, 3853 Poplar street.....	2
Superintendent, 227 City Hall	1
Audience room, 227 City Hall	1
Residence of Assistant Superintendent, 121 North Lambert street	2

Fire Marshal, 362 City Hall	1
Fire Marshal, 388 City Hall	1
Reserves roll room, 670 City Hall.....	1
City stables, Tenth and Greenwich streets.....	1
Mounted men of van stables, Eleventh and Wharton streets...	1
Residence of Fire Marshal, 3949 Baltimore avenue.....	1
Chief Clerk, 213 City Hall	1
Residence of Clerk to Superintendent, 811 North Beechwood street	1
Police Captains, 629 City Hall.....	1
Residence of Captain of Police, 2431 Carpenter street.....	1
Police Surgeon, 950 City Hall	1
Residence of Police Surgeon, 406 South Sixteenth street.....	3
Lieutenant of Reserves, 631 City Hall.....	1
Residence of Lieutenant of Reserves, 4113 Cambridge street...	1
Residence of Chief Clerk, 1845 North Twenty-fifth street.....	1
Detective Bureau, 528 City Hall	1
Detective Bureau, 536 City Hall	1
Detective Bureau, 539 City Hall	1
Matron's rooms, 635 City Hall	1
Reserve roll room, 632 City Hall.....	1
City Hall Guards, 342 City Hall.....	1
Supply room, 327 City Hall	1
Supply room, 321 City Hall	1
Motor Cycle Squad, 120 City Hall.....	1
Cell room, 643 City Hall	1
Central Station hearing room, 625 City Hall.....	1
Van stables, Eleventh and Wharton streets.....	1
Residence of Captain of Detectives, 3422 Walnut street.....	1
Assistant Superintendent of Police, 217 City Hall.....	1
Residence of Record Clerk, 227 North Fifth street.....	1
Residence of Detective McFadden, 232 North Camac street....	1

Police Stations.

First District Police Station, Twentieth and Fitzwater streets..	1
Second District Police Station, Second and Christian streets...	1
Third District Police Station, Fourth and Delancey streets....	1
Fourth District Police Station, 219 North Fifth street.....	1
Fifth District Police Station, Fifteenth and Locust streets....	1
Sixth District Police Station, southeast corner Eleventh and Winter streets	1
Seventh District Police Station, Third and Fairmount avenue..	2
Eighth District Police Station, Tenth and Buttonwood streets..	1
Ninth District Police Station, Twentieth and Buttonwood streets	1

Tenth District Police Station, 1417 North Front street.....	1
Eleventh District Police Station, 615 East Girard avenue.....	1
Twelfth District Police Station, Eighth and Jefferson streets..	1
Thirteenth District Police Station, 4431 Main street, Manayunk	1
Thirteenth District Police Sub-station, 471 Leverington street, Roxborough	1
Fourteenth District Police Station, Main and Haines streets, Germantown	1
Fourteenth District Police Sub-station, Twenty-seventh and Highland avenue, Chestnut Hill	1
Fifteenth District Police Station, Paul and Ruan streets.....	1
Sixteenth District Police Station, Thirty-ninth and Lancaster avenue	1
Seventeenth District Police Station, 1210 South Twentieth street	1
Seventeenth District Police Sub-station, Twenty-eighth and Ritner streets	1
Eighteenth District Police Station, Fourth and York streets...	1
Nineteenth District Police Station, Twelfth and Pine streets..	1
Twentieth District Police Station, Fifteenth street, below Vine street	1
Twenty-first District Police Station, 3206 Woodland avenue....	1
Twenty-second District Police Station, northwest corner Park and Lehigh avenues	1
Twenty-third District Police Station, northwest corner Nine- teenth and Oxford streets	1
Twenty-fourth District Police Station, southwest corner Bel- grade and Clearfield streets	1
Twenty-fourth District Police Sub-station, 4750 Richmond street	1
Twenty-fifth District Police Station, 1507 Moyamensing avenue.	1
Twenty-sixth District Police Station, southwest corner Trenton avenue and Dauphin street	1
Twenty-seventh District Police Station, 6834 State road.....	1
Twenty-seventh District Police Sub-station, Holmesburg.....	1
Twenty-eighth District Police Station, northwest corner Twen- tieth and Berks streets	1
Twenty-ninth District Police Station, Sixty-first and Thompson streets	1
Thirtieth District Police Station, Front and Westmoreland streets	1
Thirty-first District Police Station, Twenty-sixth and York streets	1
Thirty-second District Police Station, Sixty-fifth and Woodland avenue	1

Thirty-third District Police Station, northwest corner Seventh and Carpenter streets	1
Thirty-fourth District Police Station, Fifteenth and Snyder avenue	1
Thirty-fifth District Police Station, York road and Champlost street	1
Thirty-sixth District Police Station, 3967 Germantown avenue..	1
Thirty-seventh District Police Station, Fourth and Snyder avenue	1
Thirty-eighth District Police Station, Thirty-seventh and Woodland avenue	1
Thirty-ninth District Police Station, 4212 Ridge avenue.....	1
Delaware Harbor Police Station, Race street wharf.....	1
Delaware Harbor Police Station, Washington avenue wharf....	1
Delaware Harbor Police Station, Hanover street wharf.....	1
Schuylkill Harbor Police Station, Walnut street wharf.....	1
Motor Cycle Squad	1

Bureau of Fire.

Residence of Superintendent of Repair Shop, 1535 Morris street.	1
High Pressure, foreman's residence, 3227 North Nineteenth street	1
High Pressure, engineer's residence, 3221 Cresson street.....	1
High Pressure, engineer's residence, 3232 Cresson street.....	1
High Pressure Pumping Station, Delaware avenue and Race street	1
Fire Headquarters, 1326 Race street	1
Fire Headquarters, 1328 Race street	2
High Pressure Pumping Station, Seventh street and Lehigh avenue	1
High Pressure Fire Service System, Engineer's office, 2246 North Howard street	1
Residence of Chief Baxter, 918 New Market street.....	2

Electrical Bureau.

Chief's office, 610 City Hall	1
Residence of Chief, 1742 Diamond street.....	2
Manager's office, 616 City Hall	1
Residence of Manager, 1534 North Eighth street.....	1
Assistant Manager, 616 City Hall.....	1
Residence of Assistant Manager, 1825 North Croskey street....	1
Second Assistant Manager, 620 City Hall.....	1
Residence of Second Assistant Manager, 4412 Sansom street...	1

Electrical Engineer, 616 City Hall.....	1
Residence of Chief Inspector of Electric Lighting, 5320 Market street	1
Residence of Chief Operator, 1730 Girard avenue	1
Stenographers, 616 City Hall	1
Inspectors, 826A City Hall	1
Fire Operator, 626 City Hall	1
Police Operator, 626 City Hall	1
Telephone room, City Hall	2
Store room, 720 City Hall	1
Store house, 1517 Filbert street	1
Assistant Inspector of Electric Lighting, 1743 South Seventeenth street	1
Residence of Acting Chief Line Inspector, 2633 North Chadwick street	1
Dynamo room, City Hall	1
Police Telephone Operators, 629 City Hall.....	1
Assistant Inspector of Electric Lighting, 85 City Hall.....	1
Operating room, 612 City Hall.....	2
Operating room, 629 City Hall.....	3
Laboratory, 634 City Hall	1
Residence of Index Clerk, 872 North Fifth street.....	1
Arc light room, 85 City Hall.....	1
Residence of Draughtsman, 1902 North Eleventh street.....	1

Bureau of City Property.

Chief's office, 111 City Hall.....	1
Residence of Chief, 1725 North Seventeenth street.....	1
Residence of Superintendent of City Hall, 1515 Brown street...	2
Chief Clerk, 113 City Hall.....	1
City Hall Superintendent, 113 City Hall.....	1
Master Decorator, 68 City Hall.....	1
City Forester, 119 City Hall.....	1
Architect, 740A City Hall.....	1
Plumbing Department, 16 City Hall.....	1
Clock Tower, 799 City Hall	1
Residence of Assistant Architect, 2618 Montgomery avenue.....	1
Office, 115 City Hall	1

Bureau of Building Inspection.

Residence of Chief, 1612 North Tenth street.....	1
Office, 317 City Hall	1
Office, 319 City Hall	1
Office, 321 City Hall	1

Bureau of Elevator Inspection.

Residence of Chief, 2336 South Fifteenth street.....	1
Office, 304 City Hall	1
Office, 306 City Hall	1
Office, 308 City Hall	1

Bureau of Boiler Inspection.

Chief, 303 City Hall.....	1
Clerk, 301 City Hall.....	1

Society for Prevention of Cruelty to Animals.

Women's Branch, 36 South Eighteenth street.....	1
Pennsylvania Branch, 1627 Chestnut street.....	1

Patriotic Society of Philadelphia.

Independence Hall	1
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Department of Public Works.

Director's office, 218 City Hall.....	1
Residence of Director, 6711 Frankford avenue.....	2
Assistant Director's office, 214 City Hall.....	1
Residence of Assistant Director, 3652 Frankford avenue.....	1
Chief Clerk, 212 City Hall.....	1
Official Photographer, 730 City Hall.....	1

City Ice Boats.

752 South Twenty-third street.....	1
Holmesburg Correction wharf	1

Bureau of Highways.

Chief's office, 230 City Hall	1
Residence of Chief, 1927 North Twenty-fifth street	2
Residence of Assistant Chief, 324 Richmond street.....	2
Residence of Chief Clerk, 3310 North Fifteenth street.....	1
Highway Supervisors, 736 City Hall.....	1
Residence of General Inspector, 1529 South Fourth street.....	1

Bureau of Surveys.

318 City Hall	1
412 City Hall	1
420 City Hall	1

510 City Hall	1
532 City Hall	1
767 City Hall	1
Under Walnut Street Bridge.....	1
Residence of Chief, 4900 Penn street, Frankford.....	1
Residence of Assistant Chief Engineer, 5349 Wayne avenue....	1
Principal Assistant, 416 City Hall.....	1
Assistant Engineer, Sewers, 418 City Hall.....	1
Residence of Superintendent of Bridges, 3920 Girard avenue....	1
Office of Superintendent of Bridges, 532 City Hall.....	1
Grade Crossing Division, Broad and Huntingdon streets.....	2

Department of Supplies.

310 City Hall.....	1
312 City Hall.....	2
Residence of Assistant Director, 912 North Forty-eighth street.	1

Department of Health and Charities.

582 City Hall.....	2
586 City Hall.....	1
Holmesburg	1
Residence of Superintendent House of Correction, Holmesburg.	1
Residence of Assistant Resident Physician Philadelphia Hos- pital, 3231 Powelton avenue.....	1
Residence of Director, 1814 South Forty-seventh street.....	1
Residence of Chief Clerk to Director, 1966 North Thirty-first street	1
Solicitor, 578 City Hall	1
Residence of First Assistant, Laboratory Hygiene, 252 North Twelfth street	1
Department, 584 City Hall	2
Residence of Chief Clerk, 2645 North Thirty-third street.....	1
Administration Building New Municipal Hospital, Second and Luzerne streets	1
Residence of Chief Bureau Tenement House Inspection, 1347 Toronto street	1

Bureau of Health.

Chief Medical Inspector, 713 City Hall.....	1
Residence of Chief Medical Inspector, 1539 Columbia avenue....	2
Residence of Diagnostician and Consultant, 1411 Jefferson street	1
Milk Inspector, 513 City Hall	1
Chief Disinfecter, 582 City Hall.....	1

Chief Inspector of House Drainage, 613 City Hall.....	1
Health Officer, 615 City Hall.....	1
Nuisance Inspector, 617 City Hall.....	1
Meat Inspector, 711 City Hall.....	1
Tenement House Inspection, 727 City Hall.....	1
Registrar, 517 City Hall	1
Bacteriological Department, 715 City Hall.....	1
Bacteriological Department, 716 City Hall.....	1
Bacteriological Department, 708 City Hall.....	1
Clerks, 714 City Hall	1
Clerks, 716 City Hall	1
Chief, 710 City Hall	1
Chief Clerk, 712 City Hall	1

Civil Service Commission.

Residence of President, 1631 Walnut street.....	2
Secretary's office, 876A City Hall	3
Board room, 875 City Hall	2
Examining room, 976 City Hall.....	1

Board of Public Education.

292 City Hall	2
294 City Hall	1
297 City Hall	1
390 City Hall	1
392 City Hall	1
394 City Hall	1
690 City Hall	1
694 City Hall	1
699 City Hall	1
740 City Hall	1
742 City Hall	1
742 City Hall	1
746 City Hall	1
Residence of Secretary, 3302 North Seventeenth street.....	1
Superintendent, private, 695 City Hall.....	1
316 City Hall	1
696 City Hall	4
Residence of Dr. Brumbaugh	1

City Controller's Office.

148 City Hall	1
Residence of Controller, 4205 Chester avenue.....	2

City Solicitor's Office.

476 City Hall	1
486 City Hall	1
482 City Hall	1
474 City Hall	1
466 City Hall	1
464 City Hall	1
463 City Hall	1
462 City Hall	1
488 City Hall	1
Assistant City Solicitor, 1403 Filbert street.....	1
Residence of Assistant City Solicitor, 1334 Spruce street.....	1

Department of Receiver of Taxes.

104 City Hall	1
110 City Hall	1
Collector of Delinquent Taxes, 112 City Hall.....	1
114 City Hall	1
Water rents, 196 City Hall	1

Registration Commission.

650 City Hall	1
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Revision of Taxes.

Search Department, 177 City Hall.....	1
Real Estate Assessors, 181 City Hall.....	1

Mercantile Appraisers.

178A City Hall	1
171 City Hall	4

City Treasurer.

143 City Hall	2
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Recorder of Deeds.

152 City Hall	1
154 City Hall	1
764 City Hall	1

Register of Wills.

162A City Hall	1
164 City Hall	1

City Commissioners.

130 City Hall	3
Residence, 620 South Tenth street	1
Chief Clerk, City Hall	1

Sheriff's Office.

467 City Hall	2
471 City Hall	1
475 City Hall	1
477 City Hall	1
481 City Hall	1
Execution Clerk, 481 City Hall.....	1
577 City Hall	1

Bureau of Street Cleaning.

334 City Hall	1
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Coroner's Office.

604 City Hall	2
608 City Hall	1
Residence of Coroner, 618 East Girard avenue.....	1
Residence of Deputy Coroner, 777 North Twenty-seventh street.	1
Residence of Deputy Coroner, 3231 Norris street.....	1
Residence of Coroner's Detective, 2020 West Venango street...	1
Residence of Coroner's Detective, 1212 Moore street.....	1
The Morgue, 1307 Wood street.....	1
Residence of Deputy Coroner, 6343 Race street.....	1
Residence of Coroner's Physician, 805 South Twelfth street....	1
Residence of Chief Clerk, 3630 Unruh street.....	1
Residence of Deputy Coroner, 1809 Reed street.....	1

District Attorney's Office.

660 City Hall	1
662 City Hall	2
664 City Hall	2
666 City Hall	6
675 City Hall	1
Residence of Assistant District Attorney, 1710 South Fifteenth street	1
Residence of Assistant District Attorney, 756 South Tenth street	1

Park Commission.

127 City Hall	4
English Building, Fairmount Park.....	1
Horticultural Hall, Fairmount Park.....	1
Memorial Hall, Fairmount Park	1
Commissioner's office, Belmont, Fairmount Park.....	2
Guard House, Sedgley, Fairmount Park	2
Guard House, Belmont, Fairmount Park	1
Guard House, Woodford, Fairmount Park	1
Captain of Guards, Ohio Building, Fairmount Park.....	1

Courts of Philadelphia.

231 City Hall	1
240 City Hall	1
248 City Hall	1
252 City Hall	1
258 City Hall	1
267 City Hall	1
452 City Hall, Supreme Court	1
540 City Hall, Judge Anderson	1
Prothonotary's office, City Hall	2
765 City Hall, Probation Officers.....	1
364 City Hall, Judge Orlady	1
277 City Hall	2
280 City Hall	1
357 City Hall	1
359 City Hall	1
361 City Hall	1
362A City Hall	1
363 City Hall	1
365 City Hall	1
435 City Hall	1
442 City Hall	1
446 City Hall	1
461 City Hall	1
581 City Hall	1
644 City Hall	1
648 City Hall	1
652 City Hall	1
657 City Hall	1
Residence of Judge Magill, northeast corner Tenth street and Oak lane	3
Residence of Judge Bregy, 2033 North Broad street.....	1
Residence of Magistrate Scott, 1442 North Lawrence street...	2

Residence of Magistrate Gallagher, 155 North Twenty-first street	2
Office of Magistrate Gallagher, 1331 Arch street.....	1
Office of Magistrate Carey, 125 South Seventh street.....	1
Office of Magistrate Call, 1128 Girard avenue	1
Court of Common Pleas No. 5, 658 City Hall.....	1
Court of Common Pleas No. 5, 644 City Hall.....	1
Court of Quarter Sessions No. 1, retiring room, 453 City Hall..	1
Court of Judge Magill, 335 City Hall.....	1
Office of Magistrate McCleary, 23 North Juniper street.....	1
Residence of Magistrate Carey, 323 Pine street.....	1
Office of Magistrate Scott, 332 West Girard avenue.....	1
Residence of Magistrate Hughes, 2125 South Ninth street.....	1
Quarter Sessions, 453 City Hall.....	1
Quarter Sessions, 659 City Hall.....	1
Quarter Sessions, 676 City Hall.....	1
Quarter Sessions, 677 City Hall.....	1
Quarter Sessions, 682 City Hall.....	1
Quarter Sessions, 681 City Hall.....	1
Office of Magistrate Campbell, 2839 Kensington avenue.....	1
Residence of Magistrate Campbell, 2537 East Somerset street..	1
Probation Officer, 765 City Hall	1
Residence of Magistrate Hogg, 429 Reed street.....	1
Residence of Magistrate Morris, 2831 Oxford street.....	1
Office of Magistrate Morris, 2304 Ridge avenue.....	1
Office of Magistrate Hogg, Callowhill street, east of Fifth street	1
Office of Magistrate Harris, 3726 Market street.....	1
Residence of Magistrate Harris, 4204 Chestnut street.....	1

Orphans' Court Clerk.

413 City Hall	1
427 City Hall	1
428 City Hall	1
434 City Hall	2
Office of Clerk, 413 City Hall.....	1
430 City Hall, Judge Gummey.....	1

Supreme Court.

384 City Hall	2
456 City Hall.....	1
458 City Hall	1

Superior Court.

364 City Hall	1
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Armories.

Brigade Headquarters, 542 City Hall.....	1
First Regiment Armory, Broad and Callowhill streets.....	1
Second Regiment Armory, Broad and Susquehanna avenue....	1
Third Regiment Armory, Broad and Wharton streets.....	1
Sixth Regiment Armory, Twentieth and Montgomery avenue..	1
City Troop, Twenty-third and Ludlow streets.....	1
State Fencibles, Broad and Race streets.....	1
Second City Troop, Twenty-third and Chestnut streets.....	2

Law Library.

600 City Hall	1
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Oil Inspectors.

311 City Hall	1
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Stations Connected Direct to Central Office.

City of Philadelphia, Osmond tract, Byberry.....	1
Henry Clay, 217 City Hall.....	1
Children's Hospital, 207 South Twenty-second street.....	1
Fred Douglass Hospital, 1512 Lombard street	1
Howard Hospital, Infirmary for Incurables, Broad and Catharine streets	2
Jewish Hospital, York and Tabor roads.....	1
Jefferson Maternity Hospital, Washington square, south of Locust street	1
Jefferson Medical Hospital, 1020 Sansom street.....	1
Kensington Hospital, 136 Diamond street.....	1
Mayor Reyburn, 204 City Hall.....	1
Dr. Neff, 586 City Hall	1
Orthopædic Hospital, Seventeenth and Summer streets.....	1
Presbyterian Hospital, Thirty-ninth and Filbert streets.....	1
Samuel P. Rotan, 666 City Hall.....	1
Rush Hospital, Thirty-third and Lancaster avenue.....	1
St. Agnes Hospital, Broad and Mifflin streets.....	1
St. Joseph's Hospital, Seventeenth street and Girard avenue... 2	
St. Christopher's Hospital, Lawrence and Huntingdon streets. 1	
St. Mary's Hospital, Frankford avenue and Palmer street..... 2	
Women's College Hospital, Twenty-first street and North College avenue	1
West Philadelphia Hospital for Women, 4035 Parrish street... 2	
Women's Southern Homœopathic Hospital, 724 Spruce street... 3	

West Philadelphia Homœopathic Hospital and Dispensary, 1234 North Fifty-fourth street.....	3
Women's Homœopathic Hospital, Twentieth street and Susquehanna avenue	1
Episcopal Hospital, Front street and Lehigh avenue.....	1
Polyclinic Hospital, 1818 Lombard street.....	1
Frankford Hospital, Frankford avenue and Wakeling street....	1
Samaritan Hospital, Broad and Ontario streets.....	1
Germantown Hospital, Penn and Chew streets.....	1
Children's Homœopathic Hospital, Franklin and Thompson streets	1
Mt. Sinai Hospital, 1429 South Fifth street.....	1

Free by Ordinance.

Receiver of Taxes, 102 City Hall.....	1
Bureau of City Property, 115 City Hall.....	1
City Commissioners, 130 City Hall.....	1
City Treasurer, 143 City Hall	1
City Controller, 146 City Hall.....	1
Recorder of Deeds, 154 City Hall.....	1
Register of Wills, 162 City Hall.....	1
Board of Revision of Taxes, 180 City Hall.....	1
Mayor's private office, 206 City Hall	1
Department of Public Works, 212 City Hall.....	1
Director of Public Safety, private, 221 City Hall.....	1
Superintendent of Police, 227 City Hall	1
Bureau of Highways, 232 City Hall.....	1
Bureau of Highways (Superintendent of Bridges), 238 City Hall	1
Court of Common Pleas No. 1, 246 City Hall.....	1
Court of Common Pleas No. 2, 254 City Hall.....	1
Prothonotary Common Pleas, 266 City Hall.....	1
Court of Common Pleas No. 3, 271 City Hall	1
Bureau of Boiler Inspection, 301 City Hall.....	1
Director of Supplies, 310 City Hall.....	1
Bureau of Building Inspection, 313 City Hall.....	1
Bureau of Gas, 332 City Hall	1
Bureau of Lighting, 334 City Hall	1
Bureau of Street Cleaning, 336 City Hall.....	1
President of Common Council (Rostrum), 400 City Hall.....	1
President of Select Council, 402 City Hall.....	1
Clerks, Select Council, 406 City Hall	1
Bureau of Surveys, 412 City Hall	1
Orphans' Court, 417 City Hall.....	1

Court of Common Pleas No. 4, 444 City Hall	1
Supreme Court, 454 City Hall.....	1
City Solicitor's office, 478 City Hall.....	1
Clerks, Sheriff's office, 485 City Hall.....	1
Clerks, Common Council, 494 City Hall.....	1
Councils' Finance Committee, 496 City Hall.....	1
Captain of Detectives, 531 City Hall.....	1
Department of Health and Charities, 584 City Hall.....	1
Coroner's Clerks, 602 City Hall	1
Bureau of Health, 716 City Hall	1
Court of Common Pleas No. 5, 644 City Hall.....	1
District Attorney's clerks, 666 City Hall.....	1
Court of Quarter-Sessions, 685 City Hall.....	1
Board of Education, Superintendent, 694 City Hall.....	1
Bureau of Water, Chief, 793 City Hall.....	1
Civil Service, 875 City Hall.....	1
Philadelphia Yacht Club (courtesy), Essington, Pa.....	1
Electrical Bureau, Chestnut Hill, Police Station.....	1
E. W. Patton (courtesy), Thirty-second and Chestnut streets..	1
Assistant Manager Electrical Bureau (courtesy), 1825 North Croskey street	1

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Forty-six free by ordinance and three by courtesy.

Bureau of Surveys.

First District, 1701 Snyder avenue.
 Second District, southeast corner Broad and Morris streets.
 Fifth District, 521 West Venango street.
 Sixth District, 441 West Norris street.
 Seventh District, 1500 Montgomery avenue.
 Eighth District, 4444 Main street, Manayunk.
 Ninth District, School lane and Germantown avenue.
 Tenth District, 4534 Frankford avenue.
 Eleventh District, 4039 Lancaster avenue.
 Twelfth District, 108 South Fortieth street.
 Thirteenth District, 1525 Indiana avenue.
 Fourteenth District, 8031 Frankford avenue.

Bureau of Highways.

First District, 3900 Woodland avenue.
 Second District, 1304 Reed street.
 Fourth District, 1034 West Girard avenue.
 Fifth District, 423 West Lehigh avenue.

Sixth District, 8031 **Frankford avenue.**

Seventh District, 4253 **Ridge avenue.**

Eighth District, 5613 **Germantown avenue (202 Raymond Bldg).**

Ninth District, 447 **Mint Arcade Building (Commissioner).**

Bureau of Water.

Third Purveyor's District, **Beach street and Susquehanna avenue.**

Wentz Farm Reservoir, **Second street pike and Comly street.**

Lehigh Reservoir, **Sixth and Somerset streets.**

Oak Lane Reservoir, **Fifth street and Medary avenue.**

Fourth Purveyor's District, **Twenty-sixth and Master streets.**

East Park Reservoir, **Thirty-third street and Montgomery avenue.**

Storehouse, **Thirty-third and Thompson streets.**

Corinthian Reservoir, **Twenty-second and Parrish streets.**

Spring Garden Street, **Upper, Thirty-third and Thompson streets.**

Mr. Fuller, **788 City Hall.**

Bricklayers' shanty, **Thirty-third and Thompson streets.**

Storehouse, **Thirty-third and Thompson streets.**

Belmont Station, **West River Drive and Columbia Bridge.**

Belmont High Service Station, **Georges Hill.**

Fairmount Station, **Callowhill Street Bridge, Schuylkill.**

Draughting room, **796 City Hall.**

Draughting room, **795 City Hall.**

Chief's office, **794 City Hall.**

Mr. Lloyd, **792 City Hall.**

Lardner's Point Pumping Station, **Delaware avenue and Robbins street.**

Torresdale Filters, **State road and Pennypack street.**

Torresdale Filters, **Court No. 1.**

Torresdale Pumping Station, **State road and Pennypack street.**

Belmont Filters, **Belmont avenue and Ford road.**

Queen Lane Reservoir, **Thirty-third and Abbotsford avenue.**

Queen Lane Pumping Station, **East River Drive and School lane.**

Sixth Purveyor's District, **Town Hall, Germantown.**

Chestnut Hill Pumping Station, **Graver's Lane Station, P. and R. Railway.**

Mt. Airy Pumping Station, **Allen's lane and Mower street.**

Wm. Whitby's residence, **127 East Upsal street, Germantown.**

Mr. Fuller's residence, **3419 Hamilton street.**

Mr. McCrudden, **566 City Hall.**

Mr. Johnson, **190 City Hall.**

Telephone room, **793 City Hall.**

Paymaster, **784 City Hall.**

Mr. Bryan, **786 City Hall.**

Mr. Spence, 790A City Hall.
 Seventh Purveyor's District, Thirtieth and South streets.
 Mr. Young's residence, 682 North Thirty-third street.
 Mr. G. Whitby, 702 City Hall.
 Mr. Whitby, 702A City Hall.
 Mr. McNeal, 704 City Hall.
 Mr. Mustin, 704 City Hall.
 Mr. Logan, 701 City Hall.
 First Purveyor's District, Twelfth and Wharton streets.
 Second Purveyor's District, 918 Cherry street.
 Repair shop, Twelfth and Reed streets.
 Roxborough Pumping Station, Shawmont Station.
 Lower Roxborough Reservoir, Dearnley street, below Ridge avenue.
 Fifth Purveyor's District, 530 Leverington avenue, Roxborough.
 Upper Roxborough Reservoir, Port Royal avenue, below Ridge avenue.
 Roxborough High Service Station, Shawmont avenue and Eve street.
 Mr. Charles Lowrie, Purveyor, 2433 North Sixth street.
 Spring Garden Testing Station, Fairmount Park, eastern end Girard Avenue Bridge.

LIST OF KEYSTONE TELEPHONES.

Select Council.

Residence of President, 1537 South Fifth street.....	2
Assistant Clerk, 406 City Hall	1
Stenographer, 411 City Hall	1
Electrical and School Committee, 508 City Hall.....	1
Chairman School Committee, 1937 North Sixth street.....	1
Residence of Henry Shoch, 1503 North Sixteenth street.....	1

Common Council.

President, 490 City Hall	1
Chief Clerk, 492 City Hall	1
Assistant Clerk, 494 City Hall.....	1
Sergeant-at-Arms, 495 City Hall.....	1
Finance Committee, 496 City Hall	1
Finance Committee, 590 City Hall	1
Residence of Clerk of Finance Committee, 2159 South Fifteenth street	1
Residence of Clerk of Finance Committee, 4135 Westminster avenue	2

Chairman of Finance Committee, 410 Dickinson street.....	1
Highway Committee, 488 City Hall	1
Office of E. B. Gleason, 2033 Chestnut street.....	2
Committee room, 592 City Hall	1

Mayor.

Mayor, 206 City Hall	1
Mayor's residence, Nineteenth and Spring Garden streets.....	1
Mayor's Secretary, 204 City Hall.....	1
Clerks, 205 City Hall	1
Residence of Mayor's Secretary, 117 South Thirty-fourth street.	1
Mayor's Statistician, 203 City Hall	1

Department of Public Safety.

Residence of Director, 918 North Fifth street.....	2
Assistant Director, 215 City Hall.....	1
Director, 217 City Hall	1
Residence of Assistant Director, 831 North Fifth street.....	1
Secretary, 217 City Hall	1
Residence of Secretary, 5115 Knox street	1
Photographer, 734 City Hall	1
Detectives, 507 City Hall	1
Chief Clerk, 215 City Hall	1
Messenger to Director, 217 City Hall	1
Veterinary Surgeon, 3020 Chestnut street	1
Assistant Veterinary Surgeon, 3516 "K" street.....	1

Bureau of Police.

Supply room, 321 City Hall	1
Audience room, 227 City Hall	1
Residence of Assistant Superintendent, 121 North Lambert street	2
Assistant Superintendent, 215 City Hall	1
Fire Marshal, 362 City Hall	1
Fire Marshal, 388 City Hall.....	1
Residence of Fire Marshal, 3949 Baltimore avenue.....	2
Fire Marshal's driver, 1319 South Forty-sixth street.....	1
Assistant Fire Marshal, 228 South Fortieth street	1
Assistant Fire Marshal, 2732 North Hicks street	1
Assistant Fire Marshal, 225 Camac street	1
Assistant Fire Marshal, 3126 North Fifteenth street	1
Chief Clerk's residence, 1845 North Twenty-fifth street	1
Chief Clerk, 225 City Hall	1

Clerks, 213 City Hall	1
Chief Surgeon, 950 City Hall	1
Captain of Detectives, 531 City Hall.....	2
Lieutenant of Reserves, 631 City Hall.....	1
Detectives, 529 City Hall	2
Detectives, 533 City Hall	1
Detectives, 539 City Hall	1
Reserves' roll room, 630 City Hall.....	1
Cell room, 643 City Hall	1
Central Station, 621 City Hall	1
Captain's room, 629 City Hall.....	1
Van stables, Eleventh and Wharton streets.....	1
504 City Hall	1
Traffic Squad, court yard, City Hall.....	1
Stables, Tenth and Greenwich streets.....	1
Residence of Captain of Detectives, 3507 Lancaster avenue....	1
First District Police Station, Twentieth and Fitzwater streets.	1
Second District Police Station, Second and Christian streets....	1
Third District Police Station, Fourth and Delancey streets....	1
Fourth District Police Station, 219 North Fifth street.....	1
Fifth District Police Station, Fifteenth and Locust streets....	1
Sixth District Police Station, southeast corner Eleventh and Winter streets	1
Seventh District Police Station, Third and Fairmount avenue..	1
Eighth District Police Station, Tenth and Buttonwood streets..	1
Ninth District Police Station, Twentieth and Buttonwood streets	1
Tenth District Police Station, 1417 North Front street.....	1
Eleventh District Police Station, 615 East Girard avenue.....	1
Twelfth District Police Station, Eighth and Jefferson streets..	1
Thirteenth District Police Station, 4431 Main street, Manayunk	1
Thirteenth District Police Sub-station, 471 Leverington street.	1
Fourteenth District Police Station, Main and Haines streets..	1
Fourteenth District Police Sub-station, Twenty-seventh street and Highland avenue	1
Fifteenth District Police Station, Paul and Ruan streets.....	1
Sixteenth District Police Station, Thirty-ninth street and Lan- caster avenue	1
Seventeenth District Police Station, 1210 South Twentieth street	1
Seventeenth District Police Sub-station, Twenty-eighth and Ritner streets	1
Eighteenth District Police Station, Fourth and York streets...	1
Nineteenth District Police Station, Twelfth and Pine streets...	1

Twentieth District Police Station, Fifteenth street, below Vine street	1
Twenty-first District Police Station, Woodland avenue, west of Market street	1
Twenty-second District Police Station, northwest corner of Park and Lehigh avenues	1
Twenty-third District Police Station, northwest corner of Nineteenth and Oxford streets	1
Twenty-fourth District Police Station, southwest corner Belgrade and Clearfield streets	1
Twenty-fourth District Police Sub-station, 4750 Richmond street	1
Twenty-fifth District Police Station, 1507 Moyamensing avenue	1
Twenty-sixth District Police Station, southwest corner Trenton avenue and Dauphin street	1
Twenty-seventh District Police Station, 6834 State road.....	1
Twenty-seventh District Police Sub-station, Holmesburg.....	1
Twenty-eighth District Police Station, northwest corner Twentieth and Berks streets	1
Twenty-ninth District Police Station, Sixty-first and Thompson streets	1
Thirtieth District Police Station, Front and Westmoreland streets	1
Thirty-first District Police Station, Twenty-sixth and York streets	1
Thirty-second District Police Station, Sixty-fifth street and Woodland avenue	1
Thirty-third District Police Station, northwest corner Seventh and Carpenter streets	1
Thirty-fourth District Police Station, Fifteenth street and Snyder avenue	1
Thirty-fifth District Police Station, York road and Champlost street	1
Thirty-sixth District Police Station, 3965 Germantown avenue..	1
Thirty-seventh District Police Station, Fourth street and Snyder avenue	1
Thirty-eighth District Police Station, Thirty-seventh street and Woodland avenue	1
Thirty-ninth District Police Station, 4212 Ridge avenue.....	1
Delaware Harbor Police Station, Race street wharf.....	1
Motor Cycle Squad, Tenth and Thompson streets.....	1
Delaware Harbor Police Station, Washington avenue wharf...	2
Delaware Harbor Police Station, Hanover street wharf.....	2
Schuylkill Harbor Police Station, Walnut street wharf.....	2

Bureau of Fire.

Chief's residence, 918 New Market street.....	1
Assistant Chief's residence, 119 North Woodstock street.....	1
Assistant Chief, 2110 Market street.....	1
Assistant Engineer's residence, 4907 North Sixth street.....	1
Assistant Engineer, southeast corner Sixth and Locust streets.	1
Fire Headquarters, 1326 Race street.....	4
Pumping Station, Delaware avenue and Race street.....	1
Fire Boat Stuart, Race street wharf, Delaware	1
Chemical Engine No. 6, Bustleton	1
Engine Company No. 9, Main and Carpenter streets, German- town	1
Engine Company No. 14, 4516 Frankford avenue	1
Engine Company No. 19, 29-31, East Cheltenham avenue, German- town	1
Engine Company No. 28, Clearfield and Belgrade streets.....	1
Engine Company No. 30, 3546 Germantown avenue	1
Engine Company No. 31, 2712 North Second street.....	1
Engine Company No. 33, Richmond street, above Kirkbride street, Bridesburg	1
Engine Company No. 36, Main street, between Decatur and Hartel streets	1
Engine Company No. 37, Twenty-seventh street and Highland avenue, Chestnut Hill	1
Engine Company No. 38, Longshore street and State road....	1
Engine Company No. 42, Front and Westmoreland streets...	1
Engine Company No. 44, 3420 Haverford avenue	1
Engine Company No. 48, Seventh street, above Carpenter street	1
Engine Company No. 50, northwest corner Park avenue and Cambria street	1
Engine Company No. 51, York road and Champlost street....	1
Engine Company No. 52, Jackson and Vankirk streets.....	1
Engine Company No. 53, Fourth street and Snyder avenue....	1
Engine Company No. 54, Sixty-third street and Lancaster ave- nue	1
Engine Company No. 55, Marshall street and Erie avenue....	1
Truck Company No. 8, Seymour street and Germantown ave- nue, Germantown	1
Truck Company No. 10, Clearfield street, below Frankford ave- nue	1
Truck Company No. 13, Fiftieth street and Baltimore avenue.	1
Truck Company No. 14, 2936 Ridge avenue	1
Chemical Engine No. 7, Eighty-second street and Tincum ave- nue	1

Residence of Acting District Engineer Summers, 1101 Foulk- rod street	1
Office, High Pressure System, 2250 North Howard street.....	1

Electrical Bureau.

Manager, 616 City Hall	1
Residence of Assistant Manager, 1825 North Croskey street....	1
Second Assistant Manager, 620 City Hall.....	1
Electrical Engineer, 616 City Hall.....	1
Stenographers, 616 City Hall.....	1
Inspectors, 826A City Hall	1
Draughtsman, 618 City Hall	1
Fire Operators, 626 City Hall.....	1
Police Operators, 626 City Hall.....	1
Telephone room, City Hall	2
Police telephone operating room, 629 City Hall.....	1
Two sets for emergency service in Police or Fire Stations.....	2
Telephone room, 612 City Hall.....	2
Police operating room, 629 City Hall.....	3
Linemen's room, 826B City Hall.....	1
Foreman of Wiremen, 85 City Hall	1
Dynamo room, City Hall	1
Lamp room, 83 City Hall	1
Battery room, 926 City Hall	1
Chief Engineer, 81 City Hall	1
Elevator operators, 16 City Hall	1
Elevator repairs, 62A City Hall	1
Store house, 1517 Filbert street	1
Store house, 713 Filbert street	1
Western Union Telegraph Co., Broad and Chestnut streets....	1
Postal Telegraph-Cable Co., Juniper and Chestnut streets.....	1

Bureau of City Property.

Assistant Superintendent of City Hall, 113 City Hall.....	1
Architect, 825 City Hall	1
113 City Hall	1
Foremen of Riggers, 743 City Hall.....	1
Foreman of Laborers, 348 City Hall.....	1
Plumbing shop, 17 City Hall.....	1
Paint Shop, 68 City Hall.....	1
Carpenter's room, 51A City Hall.....	1
East pump room, 23 City Hall	1
West pump room, 69 City Hall	1

Receiving shop, 151A City Hall.....	1
Store room, 128 City Hall.....	1
Clock tower, 799 City Hall.....	1
Clock face, City Hall.....	1
Top of tower, City Hall.....	1
Independence Hall, Fifth, Sixth and Chestnut streets.....	7
City Forester, 117 City Hall.....	1
Chief, 111 City Hall	1
Office, 115 City Hall	1

Bureau of Building Inspection.

Chief, 319 City Hall	1
Residence of Chief, 1612 North Tenth street.....	1
Office, 315 City Hall.....	1
Office, 317 City Hall.....	1
Office, 321 City Hall.....	1

Elevator Inspection.

Residence of Chief, 2336 South Fifteenth street.....	1
304 City Hall	1
306 City Hall	1
308 City Hall	1

Bureau of Lighting.

Office, 334 City Hall.....	1
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Bureau of Gas.

Office, 332 City Hall.....	1
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Bureau of Boiler Inspection.

Chief's residence, 3709 York road.....	1
Chief's office, 303 City Hall.....	1

Department of Public Works.

Director, 214 City Hall.....	1
Director's residence, 6711 Frankford avenue.....	1
Chief Clerk, 212 City Hall.....	1
Photographer, 730 City Hall	1

Ice Boats.

Chestnut street pier, Delaware.....	1
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Department of Wharves, Docks and Ferries.

Room 552, Bourse Building.....	1
Room 553, Bourse Building.....	1
Room 554, Bourse Building.....	1
Room 555, Bourse Building.....	1
Room 590, Bourse Building.....	1

Bureau of Highways and Street Cleaning.

Chief, 230 City Hall	1
Office, 234 City Hall	1
Room 334, City Hall	1
Gray's Ferry Bridge, Schuylkill river.....	1
Office (S. C.), 338 City Hall.....	1
Foreman of Bridges, Residence, 5171 Columbia avenue.....	1

Board of Highway Supervisors.

Chief Draughtsman, 738 City Hall.....	1
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Bureau of Surveys.

318 City Hall	1
410 City Hall	1
534 City Hall	1
510 City Hall	1
767 City Hall	1
First Survey District, 1701 Snyder avenue.....	1
Second Survey District, southeast corner Broad and Morris streets	1
Third Survey District, 1215 Filbert street.....	1
Fourth Survey District, 724 Spring Garden street.....	1
Fifth Survey District, 521 West Venango street.....	1
Sixth Survey District, 441 West Norris street.....	1
Seventh Survey District, 1500 Montgomery avenue.....	1
Eighth Survey District, 4444 Main street, Manayunk.....	1
Ninth Survey District, Germantown avenue and School lane....	1
Tenth Survey District, 4534 Frankford avenue.....	1
Eleventh Survey District, 4039 Lancaster avenue.....	1
Twelfth Survey District, 108 South Fortieth street.....	1
Thirteenth Survey District, 1525 Indiana avenue.....	1
Grade Crossing Division, Broad and Huntingdon streets.....	2
Principal Assistant, 416 City Hall.....	1
Assistant Engineer of Sewers, 418 City Hall.....	1

Bureau of Water.

710 City Hall	1
793 City Hall	1
710A City Hall	1
794 City Hall	1
702A City Hall	2
788 City Hall	1
792 City Hall	1
Complaint Clerk, 704 City Hall.....	1
Water rents, 566 City Hall.....	1
Water rents, 568 City Hall.....	1

Department of Supplies.

310 City Hall	2
312 City Hall	2
Residence of Assistant Director, 921 North Forty-eighth street.	1

Department of Health and Charities.

578 City Hall	1
582 City Hall	2
Residence of Assistant Director, 1814 South Seventeenth street.	1

Bureau of Health.

395A City Hall	1
397 City Hall	1
395 City Hall	2
517 City Hall	1
513 City Hall	1
712 City Hall	1
716 City Hall	4
613 City Hall	1
617 City Hall	1
708 City Hall	1
714 City Hall	1
715 City Hall	1
711 City Hall	1
727 City Hall	1

Board of Civil Service.

875 City Hall	1
876 B City Hall	1
875 City Hall	1
876A City Hall	2
976 City Hall	1

Board of Public Education.

294 City Hall	2
290 City Hall	1
390 City Hall	1
392 City Hall	1
394 City Hall	1
694 City Hall	2
699 City Hall	1
690 City Hall	1
742 City Hall	3
746 City Hall	2
Dr. Brumbaugh, 695 City Hall.....	1

City Controller.

148 City Hall	1
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City Solicitor.

476 City Hall	1
466 City Hall	1
462 City Hall	1
486 City Hall	1
474 City Hall	1
482 City Hall	1
464 City Hall	1
488 City Hall	1

Receiver of Taxes.

110 City Hall	1
108 City Hall	1
Water rents, 196 City Hall.....	1
Delinquent taxes, 112 City Hall.....	1

Registration Commission.

650 City Hall	1
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Board of Revision of Taxes.

Search Department, 177 City Hall.....	2
Real Estate Assessors, 181 City Hall.....	1
178A City Hall	1

Mercantile Appraisers.

171 City Hall	3
167 City Hall	1

City Treasurer.

143 City Hall	1
143 City Hall	1

Recorder of Deeds.

Deputy Recorder, 154 City Hall.....	1
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Register of Wills.

162 City Hall	1
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City Commissioners.

130 City Hall	1
130 City Hall	1
130 City Hall	1

Office of the Sheriff.

467 City Hall	1
475 City Hall	1
471 City Hall	1
477 City Hall	1
475 City Hall	1
477 City Hall	1
Execution Clerk, 481 City Hall.....	1

Office of the Coroner.

Residence of Coroner, 618 East Girard avenue.....	1
Office, 604 City Hall	2
606 City Hall	1
The Morgue, Wood street, above Thirteenth street.....	2
Deputy Coroner's residence, 1064 Germantown avenue.....	1
Deputy Coroner's residence, 925 Wolf street	1

District Attorney.

666 City Hall	1
662 City Hall	1
664 City Hall	1
607 Mutual Life Building	1

Park Commissioners.

127 City Hall	3
Guard House, Red Bridge	1
Guard House, Rittenhouse street	1
Wissahickon Hall, Fairmount Park	1

Courts of Philadelphia.

258 City Hall	1
240 City Hall	1
242 City Hall	1
244 City Hall	1
267 City Hall	1
268 City Hall	1
280 City Hall	1
363 City Hall	1
365 City Hall	1
359 City Hall	1
361 City Hall	1
362A City Hall	1
461 City Hall	1
565 City Hall	1
581 City Hall	1
657 City Hall	1
652 City Hall	1
Common Pleas No. 5, 644 City Hall.....	1
Judge Barrett's residence, 315 South Seventeenth street.....	1
Office of Magistrate Carey, 127 South Seventh street.....	1
Office of Magistrate Call, 1128 Girard avenue	1
Judge Martin, private, 651 City Hall	1
Prothonotary's room, 264 City Hall.....	2

Court of Quarter Sessions.

685 City Hall	1
676 City Hall	1
677 City Hall	1
681 City Hall	1
Office of Magistrate Campbell, 2839 Kensington avenue.....	1
Residence of Magistrate Campbell, 2537 East Somerset street..	1

Supreme Court.

456 City Hall	1
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Law Library.

600 City Hall	1
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Oil Inspector.

311 City Hall	1
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Free Libraries.

Widener Library, Girard avenue and Broad street.....	1
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Reporter's Room.

740A City Hall	1
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Hospitals.

St. Luke's, 4414 North Broad street.....	1
Samaritan, Broad and Ontario streets.....	1
Women's, Twentieth street and Susquehanna avenue.....	1
St. Joseph's, Seventeenth street and Girard avenue.....	1
German, Corinthian and Girard avenues.....	1
Hahneman, Fifteenth and Race streets.....	1
Medico-Chirurgical, Eighteenth and Cherry streets.....	1
Episcopal, Front street and Lehigh avenue.....	1
Children's, Twenty-second and Walnut streets.....	1
Philadelphia, Thirty-fourth and South streets.....	4
Presbyterian, Thirty-ninth and Filbert streets.....	1
University, Thirty-fourth and Spruce streets.....	1
Pennsylvania, Eighth and Spruce streets.....	1
Methodist, Broad and Wolf streets.....	1
St. Agnes', Broad and Mifflin streets.....	1
Jewish, York and Tabor roads	1

*Stations Paid For by the Electrical Bureau, Connected
Direct to Central Office.*

Presbyterian Hospital, Thirty-ninth and Filbert streets.....	1
St. Mary's Hospital, Frankford avenue and Palmer street.....	1
Jefferson Hospital, 1020 Sansom street.....	1
Howard Hospital, Broad and Catherine streets.....	1
West Philadelphia Hospital for Women, 4035 Parrish street...	1
St. Agnes' Hospital, Broad and Mifflin streets.....	1
University Hospital, Thirty-fourth and Spruce streets.....	1
St. Christopher's Hospital, Lawrence and Huntingdon streets..	1
Fred. Douglass Hospital, 1512 Lombard street.....	1
Polyclinic Hospital, 1818 Lombard street.....	1
St. Joseph's Hospital, Seventeenth street and Girard avenue...	1
Medico-Chirurgical Hospital, Eighteenth and Cherry streets...	1
Women's College Hospital, Twenty-second street and North Col- lege avenue	1
Jefferson Maternity Hospital, Seventh street, south of Locust street	1
Episcopal Hospital, Front street and Lehigh avenue.....	1
Women's Hospital, Twentieth street and Susquehanna avenue.	1
Kensington Hospital, 136 Diamond street.....	1

Children's Homœopathic Hospital, Franklin and Thompson streets	1
Samaritan Hospital, Broad and Ontario streets.....	1
St. Luke's Hospital, Broad and Wingohocking streets.....	1

Free Telephones Connected With the Electrical Bureau.

President of Select Council, 408 City Hall.....	1
Chief Clerk of Select Council, 404 City Hall.....	1
Rostrum of Common Council, 400 City Hall.....	1
Mayor's retiring room, 204 City Hall.....	1
Director of Public Safety, 217 City Hall.....	1
Superintendent of Police, 227 City Hall.....	1
Chief of the Bureau of Fire, 918 New Market street.....	1
Insurance Patrol No. 1, 516 Arch street	1
Insurance Patrol No. 2, Fifth and Hackley streets.....	1
Chemical Engine No. 5, Fox Chase	1
Engine Company No. 1, 1837 South street	1
Engine Company No. 2, southwest corner Warnock and Berks streets	1
Engine Company No. 3, 117 Queen street	1
Engine Company No. 4, 1528 Sansom street	1
Engine Company No. 5, southeast corner Thirty-seventh and Ludlow streets	1
Engine Company No. 6, Montgomery avenue, below Girard avenue	1
Engine Company No. 7, Frankford avenue and Ruan street...	1
Engine Company No. 8, northeast corner Second and Quarry streets	1
Engine Company No. 10, 808 Morris street.....	1
Engine Company No. 11, southwest corner Alder and South streets	1
Engine Company No. 12, Main and Centre streets, Manayunk.	1
Engine Company No. 13, Parrish street, west of Fifteenth street	1
Engine Company No. 15, Howard street and Columbia avenue.	1
Engine Company No. 16, Forty-fourth street, below Girard avenue	1
Engine Company No. 17, 253 North Fifteenth street.....	1
Engine Company No. 18, southeast corner Uber and Callow-hill streets	1
Engine Company No. 20, northwest corner Tenth and Hunter streets	1
Engine Company No. 21, 826 New Market street	1
Engine Company No. 22, 214 Pine street	1

Engine Company No. 23, Seventh street, above Norris street..	1
Engine Company No. 24, Twentieth and Federal streets.....	1
Engine Company No. 25, 1915-17 Adams street.....	1
Engine Company No. 26, Tenth and Buttonwood streets.....	1
Engine Company No. 27, 2202 Columbia avenue.....	1
Engine Company No. 29, 1225 North Fourth street.....	1
Engine Company No. 32, southeast corner Sixth and Locust streets	1
Engine Company No. 34, 1313 North Twenty-seventh street...	1
Engine Company No. 35, Ridge avenue, above Midvale avenue.	1
Engine Company No. 39, Leverington avenue, west of Ridge avenue, Roxborough	1
Engine Company No. 40, Sixty-fifth street and Woodland ave- nue	1
Engine Company No. 41, Sixty-first and Thompson streets....	1
Engine Company No. 43, 2110 Market street	1
Engine Company No. 45, northeast corner Twenty-sixth and York streets	1
Engine Company No. 46, southeast corner Otsego and Reed streets	1
Engine Company No. 47, 3135 Gray's Ferry road	1
Engine Company No. 49, Snyder avenue, west of Fifteenth street	1
Truck Company No. 1, 2132 Fairmount avenue	1
Truck Company No. 2, Branch street, below Fourth street....	1
Truck Company No. 3, 2003 North Second street.....	1
Truck Company No. 4, 319 Delancey street	1
Truck Company No. 5, Sixteenth street, below Fitzwater street	1
Truck Company No. 6, northeast corner Haverford avenue and Preston street	1
Truck Company No. 11, Twelfth street, below Wharton street.	1
Chief of the Electrical Bureau, 610 City Hall.....	1
Assistant Manager of the Electrical Bureau, 616 City Hall....	1
Bureau of City Property, 115 City Hall.....	1
Bureau of Building Inspection, 313 City Hall.....	1
Bureau of Boiler Inspection, 301 City Hall.....	1
Chief Clerk of the Department of Public Works, 212 City Hall..	1
Superintendent of Bridges, Highway Bureau, 238 City Hall....	1
Bureau of Surveys, 416 City Hall.....	1
Department of Health and Charities, 586 City Hall.....	1
Bureau of Health, 712 City Hall	1
Board of Public Education, 292 City Hall.....	1
City Controller, 146 City Hall	1
City Solicitor, 476 City Hall	1
Receiver of Taxes, 102 City Hall.....	1

Board of Revision of Taxes, 180 City Hall.....	1
City Treasurer, 143 City Hall	1
Recorder of Deeds, 154 City Hall	1
Register of Wills, 162A City Hall.....	1
City Commissioners, 130 City Hall	1
Sheriff's office, 485 City Hall	1
Coroner's office, 604 City Hall	1
District Attorney, 666 City Hall	1
Judge McMichael, 277 City Hall	1
Common Pleas No. 2, 258 City Hall.....	1
Common Pleas No. 1, 244 City Hall.....	1
Prothonotary, Common Pleas, 266 City Hall.....	1
Judge Willson, 442 City Hall.....	1
Common Pleas No. 5, 658 City Hall	1
Court of Quarter Sessions, 682 City Hall	1
Orphans' Court, 415 City Hall	1
Supreme Court, 456 City Hall.....	1

INVENTORY OF ELECTRICAL APPARATUS IN THE VARIOUS POLICE DISTRICTS COVERED BY YOUR DEPARTMENT.

In connection with the Electrical Bureau installations in your police and fire stations, a complete inventory follows:

First District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 police patrol chemical register.
- 1 patrol stand, with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor cutout and key.
- 1 pony relay and light.
- 1 P. D. Bell 'phone to Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to Electrical Bureau, Police Board.
- 1 generator, with 1,000 ohm ringers to call stable 'phone.
- 1 1,000 ohm extension bell on 'phone line to Fifth and Nineteenth Districts.
- 1 protector board with:
 - 16 plush protectors.
 - 16 bottle fuses.

- 8 sneak fuses and carbon brick lightning arrestors.
- 8 two point ground switches.
- 1 ten push button plate, with buttons connected as follows:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Street Sergeant, to a buzzer.
 - 1 to the third floor colored men's bedroom, to a bell.
 - 1 to the Matron, to a buzzer.
 - 1 to the cell room, to a buzzer.
 - 1 to the second story front bedroom, to a bell.
 - 1 to the second story sitting room, to a buzzer.
 - 1 to the third floor bedroom, to a bell.
 - 2 buttons not in service.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.
- 1 push button from the Matron to the House Sergeant, to a buzzer.
- 1 four lever switch arranged to ring all bells and buzzers at one time.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.

Batteries.

- 21 bluestone cells on patrol talk wire.
- 16 bluestone cells on patrol box wire.
- 6 bluestone cells on police instrument local.
- 4 Leclanche cells, Gonda type, on house bells.
- 9 Leclanche cells, Gonda type, on extra battery.

Second District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 police patrol chemical register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor cutout and key.
- 1 pony relay and light.
- 1 stable wire connected to stand.
 - No. 1 signal.
 - No. 13 signal.
- W. B. G. fuses on all wires.

- 1 Bell P. D. 'phone to Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter,
connected to Keystone 'phone.
- 2 push buttons :
 - 1 to front bedroom, to a bell.
 - 1 to back bedroom, to a bell.
- 1 generator with 1,000 ohm ringers.

Batteries.

- 14 bluestone cells on patrol box wire.
- 21 bluestone cells on patrol talk wire.
- 5 Leclanche cells, Gonda type, on house bells.

Third District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 police patrol chemical register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four
lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor cutout and key.
- 1 pony relay and light.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Bell P. D. 'phone to Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter,
connected to Keystone 'phone.
- 12 push buttons :
 - 1 to Truck No. 4, to a bell.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bedroom, to a bell.
 - 1 to bedroom, to a bell.
 - 1 to patrol house, to a bell.
 - 1 to Lieutenant, to a buzzer.
 - 1 to Street Sergeant, to a buzzer.
 - 1 to Street Sergeant, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the roll room, to a buzzer.
 - 2 push buttons not in use.
- 1 push button from the Lieutenant to the House Sergeant.
- 1 push button from the Matron to the House Sergeant.

Batteries.

- 18 bluestone cells on the patrol box wire.
- 18 bluestone cells on the patrol talk wire.
- 8 Leclanche cells, Gonda type, on the house bells.

Fourth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 Shearing police patrol register with relay.
- 1 patrol stand with transmitter, receiver, 'phone hook and seven two point lever switches.
- 1 lightning arrestor cutout and key.
- 1 pony relay and lamp.
- 1 'phone line to stable on stand.
- 1 generator and 1,000 ohm ringer.
- 1 Bell P. D. 'phone to Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 1 protector board with:
 - 32 plush protectors.
 - 32 bottle fuses.
 - 16 carbon brick lightning arrestors and sneak fuse bases.
 - 8 two point lever switches for ground tests.
 - 1 single pole, single throw knife blade switch to open ground wire.
- 1 60 watt motor generator to furnish current to patrol service, storage battery, annunciators and house bell equipment.
- 1 Slate switch board panel with five double pole fused switches mounted thereon, with necessary impedance and overload protectors.
- 18 cells B. T. type storage battery.
- 9 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the cell room, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the second story back, to a buzzer.
 - 1 to the front room, to a bell.
 - 1 to the back bedroom, to a bell.
 - 1 to the patrol house, to two bells.
 - 1 not in service.

Fifth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 police patrol chemical register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 lightning arrestor cutout and key.
- 1 pony relay and light.
- 1 'phone line on stand to First and Nineteenth Districts.
- 1 generator and 1,000 ohm ringer.
- 1 Bell P. D. 'phone to Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 9 push buttons:
 - 1 to the Lieutenant, to a bell.
 - 1 to the Sergeant, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the men's room, to a buzzer.
 - 1 to the second story back bedroom, to a bell.
 - 1 to the third story front bedroom, to a bell.
 - 1 to the third story middle bedroom, to a bell.
 - 1 to the third story back bedroom, to a bell.
 - 1 to the fourth floor, to a bell.
- 1 push button from the Lieutenant to the House Sergeant's room.
- 2 dynamotors, 40 watt.
- 3 double throw, double pole, 5 ampere knife blade switches.
- 2 single throw, double pole, 5 ampere knife blade switches.
- 10 W. B. G. fuse blocks and fuses.

Sixth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and cannon switch.
- 2 small galvanometers.
- 1 single contact switch.
- 1 front and back contact switch.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 four lever switch for connecting stand to Eighth and Twentieth Districts.

- 1 two lever switch to connect 'phone in Matron's room to stand.
- 1 generator and 1,000 ohm ringer.
- 1 ten push button plate:
 - 1 to the back room, second floor, to a bell.
 - 1 to the back room, third floor, to a bell.
 - 1 to the cell room, to a bell.
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeant, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the sitting room, second floor, to a buzzer.
 - 1 to the sitting room, third floor, to a buzzer.
 - 2 push buttons not in service.
- 1 four lever switch wired to ring all bells and buzzers.
- 1 push button on patrol stand, to a bell in the patrol house.
- 1 push button from the Lieutenant to the House Sergeant.
- 1 push button from the Matron to the House Sergeant.
- 1 $\frac{1}{2}$ set telephone in the Matron's room.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.

Batteries.

- 24 bluestone cells on the patrol talk wire.
- 17 bluestone cells on the patrol box wire.
- 6 Leclanche cells, Gonda type, on the house bells.
- 6 Leclanche cells, Gonda type, on extra battery.

Seventh District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line to the Eighth District.
- 1 generator and 1,000 ohm ringer.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.

- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 1 extension Bell 'phone to the Lieutenant.
- 6 push button plate:
 - 1 to the patrol house.
 - 1 to the Matron, to a buzzer.
 - 1 to the second story front room, to a bell.
 - 3 not connected.
- 1 push button from the front door to the roll room, to a bell.
- 1 lightning arrestor cutout on Nos. 14, 26, 3, 11 and 9 signal.

Batteries.

- 4 Leclanche cells, Gonda type, on house bells.
- 16 bluestone cells on the patrol talk wire.
- 16 bluestone cells on the patrol box wire.

Eighth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 shearing register and relay.
- 1 patrol stand with transmitter, receiver, 'phone hook and seven two point lever switches.
- 1 lightning arrestor cutout and key.
- 1 pony relay and light.
- 1 four lever switch.
- 'Phone wires to Seventh, Sixth and Twentieth Districts.
- 1 protector board with 28 plush protectors, 28 bottle fuses, 14 carbon brick lightning arrestors and sneak fuse bases, 6 two point lever switches for ground test.
- 1 60 watt motor generator to furnish current to patrol service, storage battery, annunciator and house bell equipment.
- 1 slate switchboard panel with five double pole fused switches mounted thereon with necessary impedance and overload protectors.
- 18 cells B. T. type storage battery.
 - 1 generator and 1,000 ohm ringer.
 - 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
 - 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
 - 1 Western Electric double head 'phone and transmitter, connected to the Keystone 'phone.
- 9 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the Matron, to a bell.

- 1 to the sitting room, to a buzzer.
- 1 to the second story back room, to a bell.
- 1 to the third story front room, to a bell.
- 1 to the store room, to a buzzer.
- 1 to the third story middle room, to a bell.
- 1 to the third story back room, to a bell.

Ninth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and lamp.
- 1 'phone wire to Ninth Sub-station in stand.
- 1 generator and 1,000 ohm ringer.
- 18 push protectors and bottle fuses on both sides of the patrol box wires and the patrol talk wire.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected with the Keystone 'phone with plug attachment.
- 1 P. D. Bell 'phone, pay station.
- 6 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a bell.
 - 1 to the sitting room, to a bell.
 - 1 to the bedroom, second floor, to a bell.
 - 1 to the bedroom, second floor, to a bell.
 - 1 to the cell room, to a bell.
- 1 push button from the Lieutenant to the House Sergeants, to a buzzer.

Batteries.

- 17 bluestone cells on the patrol box wire.
- 21 bluestone cells on the patrol talk wire.
- 4 Leclanche cells, Gonda type, on the house bells.
- 14 Leclanche cells, Gonda type, on the extra battery.

Tenth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.

- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone wire to patrol house on stand.
- 1 generator and 1,000 ohm ringer.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.

Lightning arrestor cutouts on Nos. 3, 5, 9, 11, 14, 17 and 26 signals.

12 push buttons:

- 1 to the Lieutenant, to a buzzer.
- 1 to the Sergeant, to a buzzer.
- 1 to the Sergeant No. 2, to a buzzer.
- 1 to the Matron, to a buzzer.
- 1 to the Sergeants' sitting room, to a buzzer.
- 1 to the cell room.
- 1 to the second story back bedroom, to a bell.
- 1 to the second story front bedroom, to a bell.
- 1 to the third story front bedroom, to a bell.
- 1 to the third story back bedroom, to a bell.
- 1 to the third story sitting room, to a buzzer.
- 1 to the cellar, to a buzzer.
- 1 push button from the Lieutenant to the House Sergeants, to a buzzer.
- 1 push button from the Matron to the House Sergeants, to a buzzer.

Batteries.

- 5 Leclanche cells, Gonda type, on the house bells.
- 8 Leclanche cells, Gonda type, on the extra battery.
- 20 bluestone cells on the patrol talk wire.
- 15 bluestone cells on the patrol box wire.

Eleventh District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.

- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line to stable on stand.
- 1 generator and 1,000 ohm ringer.
- Lightning arrestor cutouts on Nos. 3, 7 and 20 signals.
- Loop on No. 5 signal arranged so it can be cut out with W. B. G. fuses.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 10 push button plate:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the second story bedroom, to a bell.
 - 1 to the east second story bedroom, to a bell.
 - 1 to the second story sitting room, to a bell.
 - 1 to the front second story bedroom, to a bell.
 - 1 to the third story sitting room, to a buzzer.
 - 1 to the west second story bedroom, to a bell.
 - 1 to the cellar.
 - 2 not connected.
- 1 push button from the Lieutenant to the House Sergeant.

Batteries.

- 5 Leclanche cells, Gonda type, on the house bells.
- 18 bluestone cells on the patrol talk wire.
- 18 bluestone cells on the patrol box wire.
- 1 double pole, 15 ampere switch, to cut out fire signal wire, for purpose of test.

Twelfth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 shearing patrol register and relay.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line to the patrol house connected to stand.
- 1 generator and 1,000 ohm ringer.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.

- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone with plug attachment.
- 1 protector board with:
 - 28 plush protectors.
 - 28 bottle fuses.
 - 14 carbon brick lightning arrestors and sneak fuse bases.
 - 4 two point ground test lever switches.
- 1 60 watt motor generator to furnish current to patrol service, storage battery, annunciators and house bell equipment.
- 1 slate switchboard panel with five double pole fused switches mounted thereon with necessary impedance and overload protectors.
- 18 cells B. T. type storage battery.
- 9 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeant, to a bell.
 - 1 to the second floor, to a bell.
 - 1 to the third floor, to a bell.
 - 1 to the Special Officers, to a buzzer.
 - 1 to the basement.
 - 1 to the cell room, to a buzzer.
 - 1 to the roll room, to a bell.
 - 1 to the sitting room, to a bell.

Thirteenth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and buzzer.
- 1 'phone line to Sub-station and St. Timothy's Hospital on stand.
- 1 'phone line to stable on stand.
- 1 generator and 1,000 ohm ring.
- 1 1,000 ohm extension bell.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.

- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 1 lightning arrestor cutout on No. 27 signal.
- 4 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeant, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the bedroom, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 12 Leclanche cells, Gonda type, on the extra battery.
- 18 bluestone cells on the patrol box wire.
- 16 bluestone cells on the patrol talk wire.

Thirteenth District Sub-Station.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 1 Kellog 'phone to the Thirteenth District, Main Station.
- 3 push buttons:
 - 1 to the Sergeants, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Fourteenth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 2 chemical police patrol registers.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 4 small galvanometers.
- 2 single contact keys.
- 2 front and back contact keys.
- 2 two contact ground test keys.
- 2 lightning arrestors, cutouts and keys.
- 1 pony relay and light.
- 1 'phone line to Fourteenth District Sub-station

- 1 'phone line to Thirty-fifth District.
- 1 'phone line to stable.
- Telephone jacks on Fourteenth District Sub-station, Thirty-fifth District, and stable wires to connect them to the patrol stand 'phone.
- 1 Bell P. D. 'phone to the Bell Exchange.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 1 protector board with 48 plush protectors, 48 bottle fuses, 24 sneak fuses and carbon brick lightning arrestors, and seven two point ground test switches.
- 1 double pole baby knife blade switch to open ground line.
- 1 double pole baby knife blade switch to cut off No. 2 signal north.
- 1 single blade, double throw baby knife blade switch to cut out police wire north.
- 1 eight push button plate:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the patrol house, to a bell
 - 1 to the pool room, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the second-story front, to a bell.
 - 1 to the third story front, to a bell.
 - 1 to the third story front, to a bell.
 - 1 to the cellar, to a bell.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.

Batteries.

- 5 Leclanche cells, Gonda type, on the house bells.
- 27 bluestone cells on the patrol talk wire.
- 18 bluestone cells on 1 patrol box wire.
- 20 bluestone cells on 1 patrol box wire.

Fourteenth District Sub-Station, Chestnut Hill.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 1 P. D. Bell 'phone to the Bell Exchange.

- 1 Kellog 'phone to the Fourteenth District.
Cutout lightning arrestors on Nos. 2 signal and 4 alarm wires.
W. B. G. fuses on both sides of Nos. 2 signal and 4 alarm wires. Telephone to the Fourteenth District and police instrument wire.
- 4 push buttons:
 - 1 to the Sergeant, to a buzzer.
 - 1 to the Sergeant, to a buzzer.
 - 1 to the front bedroom, to a bell.
 - 1 to the back bedroom, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Fifteenth District.

- 1 100 ohm advance signal bell, carbon brick lightning arrestor, cutout and fuse.
- 1 chemical police and patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and two lights.
- 1 'phone wire to stable connected to stand.
- 2 double pole, double throw knife blade switches, to transpose Director Stearns' and House of Correction Bell 'phone wires.
- 1 protector board with 54 plush protectors, 54 bottle fuses, 27 sneak fuses, carbon brick lightning protectors, 33 two point ground test switches, 1 double pole single throw knife blade switch.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to Keystone 'phone.
- 1 twelve push button plate:
 - 1 to the Lieutenant, to a bell.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the cell room, to a buzzer.
 - 1 to the hallway, to a bell.

- 1 to the bedroom, to a bell.
- 1 to the patrol house, wagon, to a bell.
- 1 to the patrol house, bedroom, to a bell.
- 5 not in service.
- 1 push button from the Lieutenant, to a buzzer, in the House Sergeant's room.

Batteries.

- 6 Leclanche cells, Gonda type, on the house bells.
- 11 Leclanche cells, Gonda type, on the extra battery.
- 20 bluestone cells on the patrol talk wire.
- 20 bluestone cells on the patrol box wire.

Sixteenth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to the Keystone 'phone.
- Lightning arrestor cutouts on No. 6 fire 'phone. No. 4 signal, No. 6 signal, No. 10 signal, No. 2 alarm, No. 275 talk wire, Presbyterian Hospital 'phone wire, West Philadelphia Survey.
- 4 double pole knife blade switches, to cut off loops on wires running west.
- 1 'phone line to stable connected to stand.
- 1 generator and 1,000 ohm ringers.
- 1 eight push button plate:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeant, to a buzzer.
 - 1 to the cellar, to a buzzer.
 - 1 to the cell room, to a bell.
 - 1 to the second floor dormitory, to a bell.
 - 1 to the third floor dormitory, to a bell.

- 1 to the sitting room, to a buzzer.
- 1 to the patrol house, to a bell.
- 1 extra push button on the patrol stand, to the bell in the patrol house.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 16 Leclanche cells, Gonda type, on the extra battery.
- 18 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.
- 2 double pole, 15 ampere knife blade switches, to cut out loops on fire signal wires for purposes of test.

Seventeenth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 protector board with 28 plush protectors, 28 bottle fuses, 14 sneak fuses and carbon brick lightning arrestors.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 extra four lever switch.
- 1 'phone line on stand to patrol stable.
- 1 'phone line on stand to Sub-station.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected to the Keystone 'phone.
- 6 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the dormitory, to a bell, second floor.
 - 1 to the dormitory, second floor, to a bell.
 - 1 to the cellar, to a bell.
- 1 push button from the Lieutenant to the house sergeant.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 14 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.

Eighteenth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical patrol register.
- 1 patrol stand, transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- Lightning arrestor cutouts on Nos. 20, 17, 7 and 11 signals.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, connected with Keystone 'phone with plug attachment.
- 6 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeant, to a buzzer.
 - 1 to the sitting room, to a bell.
 - 1 to the Matron's room, to a buzzer.
 - 1 to the bedroom, to a bell.
 - 1 to the patrol house, to a bell.
- 1 push button from the Matron to the House Sergeant.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 18 bluestone cells on patrol box wire.
- 18 bluestone cells on patrol talk wire.

Nineteenth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 shearing police patrol register.
- 1 police stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 police patrol main line relay.
- 1 slate switchboard panel with 5 fused switches and necessary resistances, impedance coils and overload protectors to operate patrol service and house bells.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line on stand to First and Fifth Districts.

- 1 'phone line on stand to stable.
- 1 generator and 1,000 ohm ringers.
- 1 1,000 ohm extension bell.
- 1 protector board with 32 plush protectors, 32 bottle fuses, 16 sneak fuses with carbon brick lightning arrestors and five two point ground test switches.
- 10 push buttons mounted on a wooden plate:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the third story front room, to a bell.
 - 1 to the third story back room, to a bell.
 - 1 to the third story middle room, to a bell.
 - 1 to the second story front room, to a buzzer.
 - 1 to the Sergeants' room, to a buzzer.
 - 1 to the basement, to a bell.
 - 1 to the cell room, to a bell.
 - 1 to the sitting room, to a bell.
 - 1 to the Matron, to a buzzer.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.
- 1 push button from the Matron's room to House Sergeant.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone with breast transmitter, with plug attachment.
- 1 60 watt dynamoter for furnishing current to police patrol, police line locals and house bell equipment.

Batteries.

- 18 cells B. T. type storage battery on entire service.

Twentieth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 police stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line on stand to Sixth and Eighth Districts, and to the patrol house.
- 1 generator and 1,000 ohm ringer.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.

- 7 push buttons:
 - 1 to the Lieutenant, to a bell.
 - 1 to the Sergeant, to a bell.
 - 1 to the Matron, to a bell.
 - 1 to the second story front room, to a bell.
 - 1 to the third story front room, to a bell.
 - 1 to the cell room, to a buzzer.
 - 1 to the patrol house, to a bell.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.
- 2 motor generators, 60 watts.
- 3 double pole, double throw, 5 ampere, knife blade switches.
- 2 single throw, double pole, 5 ampere, knife blade switches.
- 10 W. B. G. fuse blocks and fuses.

Twenty-first District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 shearing police register.
- 1 main line patrol relay.
- 1 patrol stand with transmitter, receiver, 'phone hook and seven two point lever switches.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and lamp.
- 1 'phone line to stable and Thirty-eighth District.
- 1 1,000 ohm generator.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, with plug attachment.
- 1 protector board with 32 plush protectors, 32 bottle fuses, 16 sneak fuses and carbon brick arrestors.
- 5 two point ground switches.
- 1 double pole, double throw switch to cut out Woodland avenue loop on police wire.
- 1 double pole, double throw switch to cut out Woodland avenue loop on No. 6 joker.
- 1 double throw switch to cut out Woodland avenue loop on No. 2 alarm.
- 3 lightning cutout arrestors on patrol line.
- 1 60 watt motor generator to furnish current to patrol service, storage battery and annunciators, and house bell equipment.
- 1 slate switchboard panel with five double pole fused switches

mounted thereon, with necessary impedance coil, resistances and overload protectors for use in connection with motor generator and storage battery in patrol and house equipment.

- 18 cells B. T. type storage battery on patrol and house bells.
- 1 push button, patrol stand to garage.
- 1 push button, front door to House Sergeant.
- 1 twelve point push button plate :
 - 1 Lieutenant, sitting room.
 - 1 Lieutenant, bedroom.
 - 1 Street Sergeant No. 1.
 - 1 Street Sergeant No. 2.
 - 1 Matron
 - 1 men's sitting room.
 - 1 men's cell room.
 - 1 women's cell room.
 - 1 drill room.
 - 1 garage.
 - 1 front dormitory.
 - 1 back dormitory.
- And return to annunciator in House Sergeant's room.
- 1 from Lieutenant.
- 1 from Matron.
- 1 from men's cell.
- 1 from women's cell.

Twenty-second District.

- 1 100 ohm advance signal bell and carbon brick lightning arrestor, cutout with mica fuse.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and lamp.
- 1 four lever switch.
- 1 'phone line to stable on stand.
- 1 'phone line to Thirty-ninth District Police Station on stand.
- 1 'phone line to Lieutenant on stand.
- 1 generator and 1,000 ohm ringer.

- 1 1,000 ohm extension bell.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- 1 protector board with 50 plush protectors, 50 bottle fuses, 24 sneak fuses and carbon brick protectors.
- 17 two point lever switches for ground tests.
 - 1 double pole switch to open ground wire.
 - 1 double pole switch to cut out No. 16 signal north.
- 10 push button plate:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the cell room, to a buzzer.
 - 1 to the cellar, to a bell.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the Sergeants' sitting room, to a buzzer.
 - 1 to the bedroom, third floor, to a bell.
 - 1 to the bedroom, third floor, to a bell.
 - 1 to the bedroom, second floor, to a bell.
 - 1 to the sitting room, second floor, to a buzzer.
 - 1 not connected.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 15 Leclanche cells, Gonda type, on the extra battery.
- 19 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.

Twenty-third District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 police patrol chemical register.
- 1 police stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 protector board with 24 plush protectors, 24 bottle fuses, 12 carbon brick arrestors and sneak coils.
- 4 two point ground switches.
- 3 lightning arrestor cutouts on patrol box wire.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line to stable on stand.
- 1 generator with 1,000 ohm ringer.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.

8 push buttons:

- 1 to the Lieutenant's bedroom, to a buzzer.
- 1 to the Lieutenant's sitting room, to a buzzer.
- 1 to the bedroom, to a bell.
- 1 to the bedroom, to a bell.
- 1 to the Sergeants, to a buzzer.
- 1 to the sitting room, to a buzzer.
- 1 to the cell room, to a buzzer.
- 1 to the cellar, to a buzzer.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.

Batteries.

- 6 Leclanche cells, Gonda type, on the house bells.
- 20 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.

Twenty-fourth District.

- 1 shearing register.
- 1 police stand with transmitter, receiver, 'phone hook and seven two point lever switches.
- 1 'phone line on stand to Bridesburg Sub-station.
- 1 'phone line to stable on stand.
- 1 pony relay and light.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- 1 protector board with 36 plush protectors, 36 bottle fuses, 16 sneak fuses and ground protectors.
- 1 100 ohm advance signal bell on police wire.
- 1 60 watt generator to furnish current to patrol service storage batteries and annunciators and house bell equipment.
- 1 slate switchboard panel with 5 double pole fused switches with necessary impedance coil, resistance and overload protector for use in connection with motor generator and storage battery in patrol and house equipment.
- 1 push button to the bedroom, to a bell.
- 1 push button to the Lieutenant, to a buzzer.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.
- 18 cells B. T. type storage battery.

Twenty-fourth District Sub-Station, Bridesburg.

- 1 police instrument, relay and lightning arrestor cutout.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
Lightning arrestor cutouts on Nos. 7 and 20 signals.
W. B. G. fuses on No. 380 talk wire.
- 1 push button in the roll room to a bell in the back room,
second floor.
- 1 push button in the roll room to a bell in the first floor hall.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Twenty-fifth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 police stand with transmitter, receiver, 'phone hook and four
lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line to the Thirty-seventh District on stand.
- 1 generator and 1,000 ohm ringer.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
Lightning arrestors and cutouts on Nos. 13 and 15 signal
wires.
- 1 seven push button brass plate:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Lieutenant's room, to a buzzer.
 - 1 to the Sergeant's room, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the roll room, to a buzzer.
 - 1 to the colored men's room, to a buzzer.
 - 1 to the bedroom, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 18 Leclanche cells, Gonda type, on the extra battery.
- 11 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.

Twenty-sixth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line to patrol house on stand.
- 1 generator and 1,000 ohm ringer.
- Old style fuses, hard rubber back and under screws and washers.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- 10 push buttons:
 - 1 to the Lieutenant, to a bell.
 - 1 to the Matron, to a buzzer.
 - 1 to the Sergeant, to a bell.
 - 1 to the cellar, to a buzzer.
 - 1 to the sitting room, to a bell.
 - 1 to No. 1 bedroom, to a bell.
 - 1 to No. 2 bedroom, to a bell.
 - 1 to the patrol house, to a bell.
 - 2 not connected.
- 1 four drop annunciator ringing from
 - 1 Dauphin street door.
 - 2 Trenton avenue door.
 - 3 Matron's room.
 - 4 Sergeant's room.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.

Batteries.

- 5 Leclanche cells, Gonda type, on the house bells.
- 7 Leclanche cells, Gonda type, on the extra battery.
- 18 bluestone cells on the patrol box wire.
- 18 bluestone cells on the patrol talk wire.

Twenty-seventh District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line to patrol house on stand.
- 1 four lever switch.
- 1 'phone line to Holmesburg Sub-station and Engine No. 36 on stand.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter. Protectors on Director Stearns' Bell and Keystone 'phone line.
- Water Bureau wire and House of Correction wire.
- 1 baby knife blade switch on police line to cut out line beyond station.
- 1 single pole knife blade switch to cut out all above this station on No. 9 fire 'phone.
- 1 single pole baby knife blade switch to cut out all above this station on No. 20 signal.
- 2 double pole, double throw, 15 ampere knife blade switches to Director Stearns' Bell 'phone wire and the House of Correction 'phone wire.
- 1 protector board with 28 plush protectors, 27 bottle fuses and 13 sneak fuses, carbon brick protectors.
- 12 two point single lever switches and 1 single pole baby knife blade switch to open ground wire in it.
- 6 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a bell.

- 1 to the bedroom, to a bell.
- 1 to the bedroom, to a bell.
- 1 to the bedroom, to a bell.
- 1 not connected.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 16 bluestone cells on the patrol box wire.
- 22 bluestone cells on the patrol talk wire.

Twenty-seventh District Sub-Station, Holmesburg.

- 1 100 ohm advance signal bell and lightning arrester cutout.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- Lightning arrester cutouts on No. 20 signal, No. 9 joker and 'phone to Twenty-seventh District and Engine Company No. 36.
- 1 Kellog 'phone to Engine Company No. 36 and to the Twenty-seventh District Main Station.
- 12 plush protectors, 3 not in service.
- 15 bottle fuses, 4 not in service.
- 4 push button plates:
 - 1 to the bedroom, to a bell.
 - 3 not connected.

Batteries.

- 3 Leclanche cells, Gonda type, on the house bells.

Twenty-eighth District.

- 1 100 ohm advance signal bell and lightning arrester cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two point contact ground test key.
- 1 lightning arrester, cutout and key.
- 1 pony relay and lamp.
- 1 'phone wire to stable on patrol stand.

- 1 generator and 1,000 ohm ringer.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, with plug attachment.
- 1 lightning arrestor cutout on No. 5 signal.
- 10 plush protectors.
- 1 bottle fuse.
- 6 single lever ground test switches.
- 5 push buttons:
 - 1 to the Matron, to a buzzer.
 - 1 to the bedroom, to a bell.
 - 1 to the cellar, to a buzzer.
 - 1 to the Sergeant, to a bell.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.

Batteries.

- 4 dry cells on house bells.
- 21 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.

Twenty-ninth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line on stand to patrol house.
- 1 generator and 1,000 ohm ringer.
- Porcelain base mica fuses on Nos. 6 and 10 signals, No. 2 alarm box and talk wire.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- 5 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a buzzer.

- 1 to the sitting room, to a buzzer.
- 1 to the bunk room, to a bell.
- 1 to the mounted men's stable, to a buzzer.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 11 Leclanche cells, Gonda type, on the extra battery.
- 19 bluestone cells on the patrol box wire.
- 27 bluestone cells on the patrol talk wire.

Thirtieth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 lightning arrestor, key and cutout.
- 1 pony relay and light.
- 1 generator and 1,000 ohm ringer.
- 1 'phone line to stable on stand.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- 8 push buttons.
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the front bedroom, to a bell.
 - 1 to the back bedroom, to a bell.
 - 1 to the sitting room, to a buzzer.
 - 1 to the cell room, to a buzzer.
 - 1 to the cellar, to a bell.
- 1 push button from the cell room to the House Sergeant, to a bell.
- 1 push button from the Matron to the House Sergeant, to a bell.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.
- 1 protector board with 32 push protectors, 32 bottle fuses, 16 carbon brick lightning protectors and sneak fuse bases. and four two point lever switches for ground test.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 22 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.

Thirty-first District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and cannon switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line on stand to patrol house.
- 1 generator and 1,000 ohm ringer.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, with plug attachment.
- 1 ten push button plate:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the second floor bedroom, to a bell.
 - 1 to the third floor bedroom, to a bell.
 - 1 to the cell room, to a bell.
 - 3 not connected.
- 1 push button to the patrol house, to a bell.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.
- 1 push button from the Sergeants to the House Sergeant, to a buzzer.
- 1 push button from the Matron to the House Sergeant, to a buzzer.

Batteries.

- 5 Leclanche cells, Gonda type, on the house bells.
- 14 bluestone cells on the police patrol box wire.
- 20 bluestone cells on the police patrol talk wire.
- 3 double pole, 15 ampere switches to cut out loops on fire service wires, for purpose of test.

Thirty-second District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.

- 1 patrol stand, with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, key and cutout.
- 1 pony relay and light.
- 1 'phone line to stable on stand.
- 1 generator and 1,000 ohm ringer.
- 1 single pole switch to open police line.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- Carbon brick lightning arrestor cutouts with mica fuses on both sides No. 4 signal, Philadelphia Yacht Club 'phone, No. 6 joker and No. 345 talk wire, and one side of No. 2 alarm.
- 1 push button and return buzzer to Engine Company No. 40.
- 8 push buttons:
 - 1 to the Lieutenant's bedroom, to a buzzer.
 - 1 to the Lieutenant's sitting room, to a bell.
 - 1 to the patrol house, to a bell.
 - 1 to the front bedroom, to a bell.
 - 1 to the back bedroom, to a bell.
 - 1 to the Sergeant No. 1, to a bell.
 - 1 to the Sergeant No. 2, to a bell.
 - 1 to the Hostler's room, to a bell.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.
- 1 push button from the House Sergeant to the front hall, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 10 Leclanche cells, Gonda type, on the extra battery.
- 18 bluestone cells on the patrol talk wire.
- 18 bluestone cells on the patrol box wire.

Thirty-third District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand, with transmitter, receiver, 'phone hook and four lever switch.

- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 pony relay and light.
- 1 lightning arrestor, cutout and key.
- 1 'phone line to stable on stand.
- 1 generator with 1,000 ohm ringer.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, with plug attachment.
- 11 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the second floor locker room, to a buzzer.
 - 1 to the Street Sergeant's room, to a buzzer.
 - 1 to the Street Sergeant's room, to a buzzer.
 - 1 to the cell room, to a buzzer.
 - 1 to the third floor locker room, to a buzzer.
 - 1 to the third floor dormitory, to a bell.
 - 1 to the recreation room, to a buzzer.
 - 1 to the second floor dormitory, to a bell.
 - 1 to the Matron, to a bell.
 - 1 to the cellar, to a buzzer.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 8 Leclanche cells, Gonda type, on the extra battery.
- 14 bluestone cells on the patrol box wire.
- 21 bluestone cells on the patrol talk wire.

Thirty-fourth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 stable wire on stand.

- 1 generator and 1,000 ohm ringer.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- 1 ten push button plate:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the Matron, to a buzzer.
 - 1 to the cell room, to a buzzer.
 - 1 to the third story front room, to a buzzer.
 - 1 to the third story back room, to a bell.
 - 1 to the second story front room, to a bell.
 - 1 to Engine Company No. 49, to a buzzer.
 - 1 to the cellar, to a buzzer.
 - 1 to the cellar, to a buzzer.
- 1 push button to the patrol house, to a bell.
- 1 push button from the Matron to the House Sergeant, to a buzzer.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.
- 1 push button from the front door to the House Sergeant, to a buzzer.

Batteries.

- 5 Leclanche cells, Gonda type, on the house bells.
- 17 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.

Thirty-fifth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line on stand to the Fourteenth District.
- 1 generator and 1,000 ohm ringer.
- 1 protector board with 28 plush protectors, 28 bottle fuses, 14 carbon brick lightning arrestors and sneak fuse bases, 4 two point ground test lever switches.
- 1 60 watt motor generator to furnish current to patrol service, storage batteries, annunciators and house bell equipment.
- 1 slate switchboard panel with five double pole fused switches mounted thereon with necessary impedance coil, resistance and overload protectors.

18 cells B. T. type storage battery.

5 push buttons:

- 1 to the Lieutenant, to a buzzer.
- 1 to the Sergeants, to a buzzer.
- 1 to the bedroom, to a bell.
- 1 to the sitting room, to a buzzer.
- 1 to the stable, to a bell.

Thirty-sixth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 1 lightning arrestor, cutout and key.
- 1 'phone line on stand to the Thirtieth District.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, with plug attachment.
- 1 pony relay and lamp.
- 1 1,000 ohm generator.
- 1 protector board containing 22 push protectors, 22 bottle fuses, 11 sneak fuses and carbon brick protectors.
- 4 two point ground switches.
- 1 double pole, double throw switch to cut out Nos. 16 signal north.
- 1 single pole, double throw switch on police line to cut out York road loop.
- 1 12 point push button plate:
 - 1 Lieutenant's sitting room.
 - 1 Lieutenant's bedroom.
 - 1 Sergeants' bedroom.
 - 1 Sergeants' sitting room.
 - 1 Matron's sitting room.
 - 1 Matron's bedroom.
 - 1 men's sitting room.
 - 1 men's cell room.
 - 1 women's cell room.
 - 1 drill room.
 - 1 garage.
 - 1 dormitory.

Return on annunciator to House Sergeant:
From Lieutenant.

From Sergeant.
 From Matron.
 From men's cell room.

Batteries.

- 20 bluestone cells on patrol box wire.
- 20 bluestone cells on patrol talk wire.
- 5 Leclanche cells, Gonda type, on house bells.

Thirty-seventh District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 'phone line on stand to the Twenty-fifth District.
- 1 four lever switch.
- 1 'phone line on stand to Engine Company No. 53.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter, with plug attachment.
- 1 pony relay and lamp.
- 7 Western Electric intercommunicating sets of 'phones:
 - 1 to the House Sergeant's room.
 - 1 to the Lieutenant's room.
 - 1 in the men's cell room.
 - 1 in the drill room.
 - 1 in the women's cell room.
 - 1 in the Matron's room.
 - 1 in the patrol stable.
- 14 25 ohm buzzers, connected as impedance coils on the intercommunicating system.
- 1 protector board, with 20 plush protectors, 20 bottle fuses, 10 sneak fuses, carbon brick ground protectors and four single lever, two point switches, for ground tests.
- 1 12 push button plate:
 - 1 to the Lieutenant, to a bell.
 - 1 to the Lieutenant, to a buzzer,

- 1 to the Sergeants, to a buzzer.
- 1 to the Sergeants' bedroom, to a buzzer.
- 1 to the Matron, to a buzzer.
- 1 to the dormitory, to a bell.
- 1 to the dormitory, to a bell.
- 1 to the sitting room, to a buzzer.
- 1 to the cellar, to a buzzer.
- 1 to the drill room, to a bell.
- 1 to the basement, to a buzzer.
- * 1 to the patrol house, to a buzzer.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.
- 20 bluestone cells on the patrol talk wire.
- 20 bluestone cells on the patrol box wire.
- 10 dry cells on the intercommunicating 'phone talk wire.
- 8 dry cells on the intercommunicating 'phone bell wire.

Thirty-eighth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 chemical police patrol register.
- 1 patrol stand with transmitter, receiver, 'phone hook and four lever switch.
- 2 small galvanometers.
- 1 single contact key.
- 1 front and back contact key.
- 1 two contact ground test key.
- 1 lightning arrestor, cutout and key.
- 1 pony relay and light.
- 1 'phone line to patrol house on stand.
- 1 generator and 1,000 ohm ringer.
- Lightning arrestor cutouts on No. 6 joker, No. 2 alarm, police wire and fire talk wire.
- Two lever switches on No. 6 joker, No. 2 alarm, police wire and fire talk wire, to cut off loops west on Woodland avenue.
- 1 Bell P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Keystone P. D. 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- 8 push buttons:
 - 1 to the Lieutenant, to a buzzer.
 - 1 to the roll room, to a bell.
 - 1 to the cell room, to a buzzer.

- 1 to the sitting room, to a bell.
- 1 to the colored men's bedroom, to a bell.
- 1 to the front bedroom, to a bell.
- 1 to the middle bedroom, to a bell.
- 1 to the back bedroom, to a bell.
- 1 push button from the Lieutenant to the House Sergeant, to a buzzer.

Batteries.

- 5 Leclanche cells, Gonda type, on the house bells.
- 19 bluestone cells on the police patrol wire.
- 24 bluestone cells on the police patrol talk wire.

Thirty-ninth District.

- 1 100 ohm advance signal bell and lightning arrestor cutout.
- 1 protector board, with 44 plush protectors, 44 bottle fuses, 22 carbon brick lightning arrestors and sneak fuses, 10 two point lever switches for ground test, 1 single pole baby knife blade block switch to open ground wires, one (1) single pole baby knife blade switch to cut out No. 27 single north.
- 1 wall Kellogg 'phone to Twenty-second District Police Station.
- 1 P. D. Bell 'phone to the Electrical Bureau, Police Board.
- 1 P. D. Keystone 'phone to the Electrical Bureau, Police Board.
- 1 Western Electric double head 'phone and breast transmitter.
- 5 push buttons:
 - 1 to the stable, to a bell.
 - 1 to the bedroom, to a buzzer.
 - 1 to the bedroom, to a bell.
 - 1 to the Sergeants, to a buzzer.
 - 1 to the Sergeants, to a buzzer.

Batteries.

- 20 bluestone cells on the patrol box wire.
- 20 bluestone cells on the patrol talk wire.
- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 1 and Chemical No. 3.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.

- 1 Keystone P. D. 'phone to the Electrical Bureau.
- 4 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the District Engineer, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.
- 1 brass floor push button rings the bell in the bunk room.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 2 and Chemical No. 4.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone P. D. 'phone to the Electrical Bureau.
- 1 4 push button plate:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 not in service.
- 1 brass floor push button, to ring the bell in the bunk room.
- 2 single pole baby knife blade switches on No. 14 signal.
- 1 Bell wall pay station 'phone.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 3.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 2 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
- The rigging to release the horses rings both bells.

Batteries.

- 4 dry cells to ring house bells.

Engine Company No. 4.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 2 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.

The rigging to release the horses rings the bell in the bunk room.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 5.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 push button to the Foreman, to a buzzer.
- 1 push button to a bell in the bunk room.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 6.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout, etc.
- 1 Keystone wall 'phone to the Electrical Bureau.

Engine Company No. 7.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.

- 1 Bell wall pay station 'phone.
- 5 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the District Engineer, to a buzzer.
 - 1 to the bunk room, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the loft, to a buzzer.
- Brass floor push button rings all buzzers.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 8.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 4 push buttons:
 - 1 to the bunk room, to a bell.
 - 1 to the Foreman's room, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 not in service.
- 1 Bell wall pay station 'phone.
- The rigging rings the bell in the bunk room.

Batteries.

- 6 dry cells on the house bells.

Engine Company No. 9 and Auxiliary Truck A.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 5 push buttons:
 - 1 to the Foreman of Engine Company, to a buzzer.
 - 1 to the Foreman of Truck Company, to a buzzer.
 - 1 to the bunk room, to a bell.

- 1 to the sitting room, to a buzzer.
- 1 to the third floor, to a bell.
- The rigging works all bells and buzzers.

Batteries.

- 4 Leclanche cells, Gonda type, to ring the house bells.

Engine Company No. 10.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 2 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 11.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 4 push button plate:
 - 1 to the bunk room, to a bell.
 - 1 to the Foreman, to a buzzer.
 - 1 to the loft, to a bell.
 - 1 to the sitting room, to a buzzer.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 12.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.

- 1 lightning arrestor cutout.
- 1 Keystone P. D. 'phone to the Electrical Bureau.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the sitting room, to a buzzer.
- Brass floor push button to ring the bell in the bunk room.

Batteries.

- 3 Leclanche cells, Gonda type, to ring the house bells.

Engine Company No. 13.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 1 5 push button plate:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the third story, to a bell.
 - 1 not connected.
- Brass floor push button rings the bell in the bunk room, and an extra bell in the loft.
- 2 push protectors on Superintendent John M. Sparks' house 'phone wire.

Batteries.

- 4 Leclanche cells, Gonda type, to ring the house bells.

Engine Company No. 14 and Truck No. 15.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 1 push button to the bunk room, to a bell.

Batteries.

- 2 dry cells.

Engine Company No. 15.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.

Engine Company No. 16.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 2 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 17.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone P. D. 'phone to the Electrical Bureau.
- 2 push buttons:
 - 1 to the bedroom, second story, to a bell.
 - 1 to the bedroom, third story, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 18.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.

- 1 Keystone wall 'phone to the Electrical Bureau.
- 4 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the third floor, to a buzzer.
- 1 brass floor push button rings the bell in the bunk room.

Batteries.

- 6 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 19.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 1 push button to a bell in the bunk room.
- 1 brass floor push button rings the bell in the bunk room.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 20.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 push button to a buzzer on the second floor, and a buzzer on the third floor.
- The riggings ring the buzzers.

Batteries.

- 3 dry cells ring the buzzers.

Engine Company No. 21.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.

- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 P. D. Keystone 'phone to the Electrical Bureau.
- 1 floor push button to bell in the bunk room, and a bell in the Foreman's room.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 22.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 4 push button plate:
 - 1 to the yard, to a bell.
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the loft, to a buzzer.
- 1 Keystone P. D. 'phone to the Electrical Bureau.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 23.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 4 push buttons.
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the sitting room, to a buzzer.
 - 1 to the third floor, to a buzzer.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 24.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 2 push buttons:
 - 1 to the Foreman, to a bell.
 - 1 to the sitting room, to a buzzer.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 25.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.
- 1 brass floor push button rings the bell in the bunk room.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 26.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Kellogg wall 'phone to the Eighth District.

Engine Company No. 27.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.

- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 2 push buttons:
 - 1 to the bunk room, to a bell.
 - 1 to the District Engineer, to a buzzer.
- Brass floor push button rings the bell in the bunk room.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 28.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bedroom, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 29, Truck No. 7 and Chemical.

- 1 15 inch electro mechanical gong.
- 2 4½ inch umbrella joker bells.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 3 push buttons:
 - 1 to the District Engineer, to a bell.
 - 1 to the bunk room, to a bell.
- 1 floor push button rings the bell in the bunk room.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 30.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 5 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the District Engineer, to a bell.
 - 1 to the third floor, to a bell.
 - 1 not connected.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 31.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.

Engine Company No. 32 and Chemical No. 1.

- 1 15 inch electro mechanical gong.
- 2 4½ inch umbrella joker bells.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 P. D. Keystone 'phone to the Electrical Bureau.
- 3 push buttons:
 - 1 to the District Engineer, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the loft, to a buzzer.
- Brass floor push button rings all bells.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 33.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.

Engine Company No. 34.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the sitting room, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 35.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 2 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 36.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.

- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 2 push protectors.
- 1 Kellogg wall 'phone to the Twenty-seventh District, and the
Twenty-seventh District Sub-station.
- 2 double pole knife blade switches on the alarm wire to cut off
loop running to the Water Company.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the sitting room, to a buzzer.

Batteries.

- 5 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 37.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 2 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
- The rigging works the bell in the bunk room.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 38.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.

- 1 to the bunk room, to a bell.
- 1 to the sitting room, to a buzzer.
- A floor push button rings the bell in the bunk room.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 39.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 P. D. Keystone 'phone to the Electrical Bureau.
- 2 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 40.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 4 push buttons:
 - 1 to the Thirty-second District, to a buzzer.
 - 1 to the Foreman, to a bell.
 - 2 push buttons to the bunk room, to a bell.
- 1 push button from the Thirty-second District, to a buzzer.
- Brass floor push button rings all bells.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 41.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.

- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.

Engine Company No. 42.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.

Engine Company No. 43, Truck No. 9 and Water Tower.

- 1 15 inch electro mechanical gong.
 - 2 4½ inch umbrella joker bells.
 - 1 single contact key.
 - 1 lightning arrestor cutout.
 - 1 Keystone wall 'phone to the Electrical Bureau.
 - 1 P. D. Keystone 'phone to the Electrical Bureau.
 - 3 push buttons:
 - 1 to the Assistant Chief, to a buzzer.
 - 1 to the Foreman, to a buzzer.
 - 1 to ring bell in Assistant Chief's room; a bell in the Foreman's room; a bell in the bunk room, and a bell in the third story.
- Also worked by the electric light switch.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 44.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 floor push button, operating:
 - Buzzer to Foreman.
 - Bell to dormitory.

Buzzer to loft.
Buzzer to sitting room.
Bell to outbuilding.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 45.

1 15 inch electro mechanical gong.
1 4½ inch umbrella joker bell.
1 single contact key.
1 lightning arrestor cutout.
1 Keystone wall 'phone to the Electrical Bureau.
3 push buttons:
 1 to the Foreman, to a buzzer.
 1 to the sitting room, to a buzzer.
 1 to the bunk room, to a bell.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 46.

1 15 inch electro mechanical gong.
1 4½ inch umbrella joker bell.
1 single contact key.
1 lightning arrestor cutout.
1 Keystone wall 'phone to the Electrical Bureau.
1 brass floor push button, to a bell in the bunk room.

Batteries.

2 dry cells on bell to bunk room.

Engine Company No. 47.

1 15 inch electro mechanical gong.
1 4½ inch umbrella joker bell.
1 single contact key.
1 lightning arrestor cutout.
1 P. D. Keystone 'phone to the Electrical Bureau.
1 private 'phone to Harrison Brothers.

2 push buttons:

- 1 to the Foreman, to a buzzer.
- 1 to the bunk room, to a bell.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 48.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 3 push buttons:
 - 1 to Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 49.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 P. D. Keystone 'phone to the Electrical Bureau.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.

Batteries.

3 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 50 and Truck No. 12.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.

1 Keystone wall 'phone to the Electrical Bureau.

5 push buttons:

1 to the bunk room, to a bell.

1 to the Foreman of Engine Company, to a buzzer.

1 to the Foreman of Truck Company, to a buzzer.

1 to the sitting room, to a buzzer.

1 to the third floor, to a bell.

1 floor push button rings all the bells and buzzers.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 51.

1 15 inch electro mechanical gong.

1 4½ inch umbrella joker bell.

1 single contact key.

1 lightning arrestor key and cutout.

1 Keystone wall 'phone to the Electrical Bureau.

1 Bell wall pay station 'phone.

4 push buttons.

1 to the Foreman, to a buzzer.

1 to the bunk room, to a bell.

1 to the sitting room, to a buzzer.

1 to the third floor, to a bell.

1 brass floor push button rings all bells and buzzers.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 52.

1 15 inch electro mechanical gong.

1 4½ inch umbrella joker bell.

1 lightning arrestor key and cutout.

1 Keystone wall 'phone to the Electrical Bureau.

1 Bell wall pay station 'phone.

4 push buttons:

1 to the Foreman's room, to a buzzer.

1 to the sitting room, to a buzzer.

1 to the bunk room, to a bell.

1 to the loft, to a buzzer.

Batteries.

4 dry cells on the house bells.

Engine Company No. 53.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Kellog wall 'phone to the Thirty-seventh District Police Station.
- 1 4 push button plate:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the hay loft, to a buzzer.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Engine Company No. 54.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 4 push button plate:
 - 1 to the Foreman, to a bell.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the hay loft, to a buzzer.

Batteries.

- 4 dry cells on the house bells.

Engine Company No. 55.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.

1 floor push operating:

Buzzer to Foreman.

Bell to dormitory.

Buzzer to sitting room.

Bell to loft.

Truck No. 1.

1 15 inch electro mechanical gong.

1 4½ inch umbrella joker bell.

1 single contact key.

1 lightning arrestor cutout.

1 Keystone wall 'phone to the Electrical Bureau.

1 4 push button plate:

1 to the Foreman, to a buzzer.

1 to the sitting room, to a buzzer.

1 to the bunk room, to a bell.

1 to the hay loft, to a buzzer.

Batteries.

4 dry cells on the house bells.

Truck No. 2.

1 15 inch electro mechanical gong.

1 4½ inch umbrella joker bell.

1 single contact key.

1 lightning arrestor cutout.

1 P. D. Keystone 'phone to the Electrical Bureau.

1 Bell wall pay station 'phone.

4 push buttons:

1 to the Foreman, to a buzzer.

1 to the bunk room, to a bell.

1 to the sitting room, to a buzzer.

1 to the third floor, to a buzzer.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Truck No. 3.

1 15 inch electro mechanical gong.

1 4½ inch umbrella joker bell.

1 single contact key.

1 lightning arrestor cutout.

1 Keystone wall 'phone to the Electrical Bureau.

Truck No. 4.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 5 push buttons:
 - 1 to the District Engineer, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the Foreman, to a buzzer.
 - 1 to the third floor, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 push button from the Third Police District, to a bell.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Truck No. 5.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bedroom, to a bell.

Batteries.

- 3 dry cells on the house bells.

Truck No. 6.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.

3 push buttons:

- 1 to the Foreman, to a buzzer.
- 1 to the District Engineer, to a buzzer.
- 1 to the bunk room, to a bell.

Batteries.

3 Leclanche cells, Gonda type, on the house bells.

Truck No. 8.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 4 push buttons:
 - 1 to the District Engineer's room, to a buzzer.
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Truck No. 10.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 3 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the sitting room, to a buzzer.
 - 1 to the bunk room, to a bell.
- Floor push button rings bell in the bunk room.

Batteries.

4 Leclanche cells, Gonda type, on the house bells.

Truck No. 11.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 4 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell, and to a bell and buzzer, in the cellar.
 - 1 to the third floor, to a buzzer.
 - 1 to the sitting room, to a buzzer.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Truck No. 13.

- 1 15 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau./
- 1 Bell wall pay station 'phone.
- 4 push buttons:
 - 1 to the Foreman, to a buzzer.
 - 1 to the bed room, to a bell.
 - 1 to the sitting room, to a buzzer.
 - 1 to the third floor, to a buzzer.
- 1 4 lever switch rings all bells and buzzers.

Batteries.

- 4 Leclanche cells, Gonda type, on the house bells.

Chemical Engine Company No. 5.

- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 1 cutout lightning arrestor of No. 20 signal.

2 push buttons:

- 1 to the bunk room, to a bell.
- 1 to the sitting room, to a buzzer.

Batteries.

4 dry cells on the house bells.

Chemical Engine Company No. 6.

- 1 4½ inch umbrella joker bell.
- 1 single contact key.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 1 Bell wall pay station 'phone.
- 1 Kellog wall 'phone to the Twenty-seventh Police District Sub-station.
- 3 push buttons:**
 - 1 to the Foreman, to a buzzer.
 - 1 to the bunk room, to a bell.
 - 1 to the sitting room, to a buzzer.

Batteries.

3 dry cells on the house bells.

Chemical Engine Company No. 7.

- 1 8 inch electro mechanical gong.
- 1 4½ inch umbrella joker bell.
- 1 lightning arrestor cutout.
- 1 Keystone wall 'phone to the Electrical Bureau.
- 4 push buttons:**
 - 1 to the Foreman, to a bell.
 - 1 to the bunk room, to a bell.
 - 1 to the loft, to a bell.
 - 1 to the sitting room, to a buzzer.

Showing the Box in each District having the Greatest Number of Telephone Calls during the year 1910.

Districts.	No. of box	Locations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
First	4	Sixteenth and Kater streets	1,064	1,104	517	902	1,083	1,070	1,064	1,075	1,107	1,198	1,120	1,124	12,458
Second	31	Thirteenth and Bainbridge streets	1,064	1,672	1,678	1,625	1,673	1,675	1,678	1,682	1,685	1,680	1,684	1,692	20,098
Third	52	Seventh and Walnut streets	1,190	1,160	985	990	1,070	1,060	1,065	1,065	1,065	1,196	1,165	1,189	13,240
Fourth	341	Seventh and Race streets	1,197	975	589	742	1,318	1,222	1,234	1,238	1,200	1,200	1,240	1,236	13,391
Fifth	323	Eleventh and Sansom streets	1,240	1,130	1,240	1,531	1,900	1,566	1,498	1,395	1,220	1,305	1,440	1,500	16,733
Sixth	135	Eighth and Race streets	1,607	1,362	1,560	1,460	1,492	1,486	1,478	1,471	1,471	1,477	1,470	1,477	17,818
Seventh	141	Front street and Fairmount avenue	1,178	1,086	1,152	1,140	1,117	1,111	1,149	1,129	1,187	1,179	1,138	1,191	13,686
Eighth	21	Ninth and Spring Garden streets	1,516	1,965	1,506	1,463	1,393	1,461	1,513	1,515	1,465	1,518	1,170	1,517	17,311
Ninth	9	Ridge and Fairmount avenues	1,760	1,460	725	1,490	1,740	1,450	1,540	1,575	1,610	1,770	1,750	1,785	17,645
Tenth	14	Fifth street and Girard avenue	2,712	1,450	770	1,770	2,700	2,586	2,575	2,570	2,645	2,575	2,645	2,583	27,581
Eleventh	34	Richmond and Sergeant streets	1,426	1,210	1,298	1,082	1,426	1,372	1,426	1,426	1,408	1,421	1,380	1,426	16,271
Twelfth	3	Watts street and Girard avenue	1,399	1,273	1,410	1,365	1,896	1,360	1,408	1,398	1,952	1,399	1,350	1,395	16,505
Thirteenth	16	Pensdale street and Walnut lane	1,064	756	---	152	1,211	1,155	1,244	1,135	1,131	1,224	1,293	1,266	11,641
Fourteenth	123	Haines and Magnolia streets	1,965	588	---	340	1,372	1,215	1,200	1,420	1,440	1,395	1,440	1,498	13,263
Fifteenth	152	Frankford avenue and Margaret street	1,133	834	120	438	1,190	1,063	1,047	1,025	989	1,180	1,104	1,172	11,234
Sixteenth	72	Thirty-seventh and Aspen streets	1,370	1,068	78	738	1,451	1,394	1,438	1,348	970	1,498	1,371	1,456	14,118

Showing the Box in each District having the Greatest Number of Telephone Calls—Continued.

Districts.	No. of box	Locations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Seventeenth-----	323	Twenty-fourth and Wharton streets-----	1,012	712	471	601	1,242	1,226	1,347	1,307	1,413	1,431	1,365	1,218	13,555
Eighteenth-----	16	Philip and Berks streets-----	877	792	872	851	875	846	873	842	850	873	842	873	10,266
Nineteenth-----	6	Broad and Pine streets-----	1,246	1,194	1,436	1,387	1,426	1,399	1,241	1,375	1,368	1,272	1,379	1,306	16,119
Twentieth-----	8	Fifteenth and Market streets-----	1,328	1,026	763	1,044	1,246	1,181	1,253	1,135	1,142	1,414	1,365	1,412	14,314
Twenty-first-----	125	Forty-fourth street and Baltimore avenue-----	879	531	23	183	822	823	553	825	788	959	810	987	8,183
Twenty-second-----	7	Broad and Tioga streets-----	753	124	-----	129	620	522	558	620	528	620	522	620	5,616
Twenty-third-----	64	Thirty-first street and Girard avenue-----	1,154	1,047	943	971	1,152	1,161	1,158	1,162	1,152	1,158	1,150	1,152	13,360
Twenty-fourth-----	42	Richmond street and Allegheny avenue-----	600	620	684	662	633	660	685	685	662	682	660	683	8,056
Twenty-fifth-----	231	Fourth and Morris streets-----	1,036	1,072	879	1,283	1,220	1,065	1,094	1,151	1,100	1,155	1,123	1,357	13,594
Twenty-sixth-----	55	Kensington avenue and Oakdale street-----	759	641	749	732	763	738	764	763	736	765	739	759	8,908
Twenty-seventh-----	6	Torresdale avenue and Longshore street-----	592	592	654	570	742	570	589	499	575	835	580	633	7,431
Twenty-eighth-----	41	Twelfth and Berks streets-----	1,311	913	480	1,114	1,346	1,055	1,045	1,004	1,119	1,287	1,241	1,853	14,263
Twenty-ninth-----	223	Forty-eighth street and Lancaster avenue-----	1,659	1,498	1,298	1,569	1,570	1,549	1,571	1,589	1,597	1,589	1,591	1,595	18,675
Thirtieth-----	23	Howard and Cambria streets-----	521	508	517	504	516	510	518	521	524	526	528	524	6,215
Thirty-first-----	37	Twenty-eighth and York streets-----	1,250	780	620	710	1,180	1,210	1,000	1,336	1,062	1,133	1,250	1,122	12,763
Thirty-second-----	331	Seventy-second street and Woodland ave.-----	1,244	971	1,116	822	1,253	1,215	1,188	1,165	1,062	1,372	1,227	1,328	13,983

Showing the Box in each District having the Greatest Number of Telephone Calls—Continued.

Districts.	No. of box	Locations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Thirty-third	24	Passyunk and Washington avenues	837	928	1,318	745	1,022	1,083	1,076	565	747	933	948	963	11,165
Thirty-fourth	144	Thirteenth and Reed streets	1,400	1,472	1,050	1,420	1,864	1,590	1,426	1,310	1,270	1,333	1,410	1,271	16,816
Thirty-fifth	32	Tabor road and Clinton street	825	548	310	471	990	941	1,128	697	872	1,080	886	866	9,564
Thirty-sixth	124	Fifth and Butler streets	660	595	655	633	659	637	662	661	635	660	634	661	7,752
Thirty-seventh	422	Seventh street and Montgomery avenue	864	996	1,071	1,061	1,075	1,135	779	889	648	848	779	1,041	11,187
Thirty-eighth	124	Forty-eighth street and Baltimore avenue	1,648	1,337	943	1,207	1,750	1,530	1,750	1,681	1,508	1,667	1,798	1,800	18,614
Thirty-ninth	216	Seventeenth street and Erie avenue							1,152	1,072	1,029	1,191	919	1,320	6,683

Showing the Box in each District having the Greatest Number of Wagon Calls during the year 1910

District.	No. of box	Location.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
First	4	Sixteenth and Kater streets	2	5	6	12	12	13	9	7	15	19	9	5	114
Second	17	Seventh and Bainbridge streets	5	9	7	9	12	11	17	26	20	19	12	9	156
Third	18	Second and Lombard streets	26	28	31	30	36	32	30	34	31	28	24	32	362
Fourth	413	Delaware avenue and Market street	4	8	10	12	16	17	19	17	20	11	16	14	164
Fifth	23	Tenth and Locust streets	8	18	46	34	22	20	18	17	17	25	18	23	268
Sixth	55	Ninth and Race streets	30	20	15	30	31	28	16	17	31	26	30	33	307
Seventh	26	Fifth and Callowhill streets	28	26	21	27	42	67	43	45	37	53	44	36	469
Eighth	18	Seventh and Callowhill streets	20	32	46	36	28	39	70	42	36	10	13	11	383
Ninth	9	Ridge and Fairmount avenues	7	10	13	12	15	12	5	18	13	6	8	10	129
Tenth	14	Fifth street and Girard avenue	12	12	21	11	11	8	14	7	16	6	5	10	133
Eleventh	34	Richmond and Sargeant streets	13	15	16	11	15	11	12	9	12	13	14	18	159
Twelfth	12	Ninth and Poplar streets	3	1	---	5	7	11	4	9	7	9	6	4	66
Thirteenth	16	Pensdale street and Walnut lane	11	8	8	8	10	9	8	7	14	5	5	11	104
Fourteenth	6	Chelton avenue and P. and R. Railroad	1	8	2	1	1	6	2	3	10	4	4	8	50
Fifteenth	151	Frankford avenue and Bridge street	4	11	14	7	8	7	11	19	7	8	9	5	110
Sixteenth	23	Forty-second street and Lancaster avenue	8	6	9	13	7	12	11	3	12	8	9	14	112

Showing the Box in each District having the Greatest Number of Wagon Calls—Continued.

District.	No. of box	Location.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Seventeenth	25	Twenty-eighth and Federal streets	10	9	13	10	16	12	22	17	13	13	16	19	170
Eighteenth	22	Hope and York streets	7	6	13	11	14	8	15	8	12	12	4	9	119
Nineteenth	18	Tenth and South streets	12	12	17	26	14	21	29	19	17	12	19	7	205
Twentieth	3	Fifteenth and Market streets	36	43	26	23	35	36	35	30	26	38	33	38	399
Twenty-first	12	Thirty-sixth and Market streets	8	4	7	12	13	10	12	13	14	16	9	11	129
Twenty-second	237	Delhi and Cumberland streets	3	3	---	1	2	4	1	6	7	4	6	3	40
Twenty-third	21	Twenty-third street and Ridge avenue	3	14	20	21	16	14	9	16	15	22	12	9	171
Twenty-fourth	42	Richmond street and Allegheny avenue	11	17	20	43	22	16	16	10	10	9	1	1	176
Twenty-fifth	43	Eighth and Fernon streets	7	6	10	4	4	7	7	5	6	9	7	15	87
Twenty-sixth	55	Kensington avenue and Oakdale street	3	5	5	12	7	6	8	7	4	9	7	3	76
Twenty-seventh	23	State road and Robbins street	7	1	4	7	2	3	4	5	6	4	3	2	48
Twenty-eighth	36	Twenty-ninth and Diamond streets	5	2	2	6	9	7	6	7	3	2	4	10	63
Twenty-ninth	34	Fiftieth street and Lancaster avenue	1	1	4	3	13	8	9	19	3	6	6	9	82
Thirtieth	33	Kensington avenue and "C" street	10	2	3	3	2	5	2	5	11	1	4	8	56
Thirty-first	34	Thirty-second and Dakota streets	4	3	1	4	7	6	11	5	9	2	3	1	56
Thirty-second	31	Forty-ninth street and Woodland avenue	5	14	11	14	7	5	1	13	12	3	6	5	101

Showing the Box in each District having the Greatest Number of Wagon Calls—Continued.

District.	No. of box	Location.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Thirty-third	24	Passyunk and Washington avenues	8	18	25	18	16	16	16	17	21	12	12	10	208
Thirty-fourth	144	Thirteenth and Reed streets	5	5	4	14	19	6	11	27	11	9	8	2	121
Thirty-fifth	412	Second street pike and Wyoming avenue				1	3	2	5	2	1				14
Thirty-sixth	124	Fifth and Butler streets	6	4	1		5	4	8	7	2	6	1	7	51
Thirty-seventh	33	Ninth and Winton streets	2	8	8	7	4	7	8	10	4	8	11	6	83
Thirty-eighth	3	Sixtieth and Ludlow streets	2	1	2	4	6	4	3	5	3	3	2	2	37
Thirty-ninth	141	Twenty-second and Toronto streets							13	7	8	4	8	4	44

Synopsis of Wagon Calls of the Various Patrols During the year 1910.

Months.	Patrol No. 1—1st and 5th Districts.					Patrol No. 2—2d District.					Patrol No. 3—3d District.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January.....	127	57	6	12	202	147	45	8	16	216	156	64	16	96	334
February.....	201	49	3	43	296	206	46	1	14	269	174	56	10	96	336
March.....	255	40	3	69	367	149	40	4	16	209	168	68	20	101	357
April.....	235	56	6	36	333	209	46	—	15	270	190	71	14	104	379
May.....	204	39	1	24	268	197	43	3	16	259	209	73	9	109	400
June.....	189	53	1	17	270	203	44	1	15	263	190	88	11	102	391
July.....	204	51	3	16	274	224	65	2	16	307	190	106	16	108	420
August.....	248	58	2	22	330	238	50	—	15	303	239	104	8	106	457
September.....	212	51	1	20	284	212	57	1	16	286	227	79	10	102	418
October.....	227	52	5	31	315	224	52	2	16	294	225	80	12	98	415
November.....	248	62	7	17	334	189	53	4	15	261	217	86	15	107	425
December.....	261	68	8	17	354	174	49	2	16	241	239	97	17	112	465
Totals.....	2,621	686	46	324	3,627	2,374	590	23	186	3,179	2,424	972	153	1,243	4,797

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 4—4th District.					Patrol No. 6—6th District.					Patrol No. 7—7th and 8th Districts.				
	Conveyance of prisoners.	Injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January.....	120	56	7	8	191	286	59	5	74	424	219	82	7	109	417
February.....	104	86	2	10	152	318	62	2	86	468	251	88	8	153	500
March.....	122	47	3	19	191	294	91	4	172	561	440	90	7	196	733
April.....	126	45	6	2	179	336	79	—	147	562	319	88	6	121	534
May.....	148	51	3	8	210	420	60	3	25	508	363	85	3	116	567
June.....	144	49	6	2	201	362	54	2	83	501	366	92	2	74	534
July.....	175	64	5	2	246	419	60	1	30	510	446	102	9	102	659
August.....	161	65	5	10	241	286	76	3	106	471	389	108	3	77	577
September.....	165	49	2	1	217	202	94	2	172	470	404	94	4	115	617
October.....	170	60	5	7	242	—	—	—	—	—	230	64	3	66	363
November.....	195	69	5	3	272	—	—	—	—	—	204	62	8	96	370
December.....	182	64	7	6	259	—	—	—	—	—	210	60	8	86	364
Totals.....	1,812	655	56	78	2,601	2,923	635	22	886	4,475	3,841	1,015	68	1,311	6,235

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 8—6th and 8th Districts.					Patrol No. 9—9th District.					Patrol No. 10—10th District.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January.....						88	44	5	64	201	93	20	4	53	175
February.....						91	45	2	117	255	78	26	3	109	216
March.....						111	62	2	88	263	115	25	1	131	272
April.....						162	49	1	98	310	120	20	1	100	241
May.....						140	65	3	72	279	104	23	3	55	184
June.....						111	44		95	250	115	22		39	176
July.....						106	29	3	51	189	108	37	1	30	176
August.....						166	67	1	101	335	127	27	3	37	194
September.....						137	54	3	115	309	135	24		88	197
October.....	246	41	1	220	508	118	39	1	83	241	113	92		47	182
November.....	283	101	3	151	538	123	42	6	88	262	78	17	2	50	147
December.....	387	107	5	138	637	120	36	4	73	233	127	33	2	33	195
Totals.....	916	249	9	509	1,683	1,466	576	80	1,045	3,127	1,313	296	19	727	2,355

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 11—11th District.					Patrol No. 12—12th District.					Patrol No. 13—13th District.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January.....	60	26	1	21	108	44	31	4	69	148	37	16	4	11	63
February.....	68	32	6	59	165	39	36	6	92	173	29	11	1	22	63
March.....	90	28	3	103	224	61	27	2	64	154	32	14	2	18	66
April.....	97	40	4	59	203	50	30	4	48	132	33	6	2	20	59
May.....	69	34	1	34	138	53	31	3	73	165	34	15	5	23	77
June.....	65	25	1	48	139	43	27	4	64	143	39	14	2	12	67
July.....	53	29	2	56	170	55	39	3	78	161	46	13	1	23	83
August.....	61	33	3	27	124	57	22	2	66	147	44	8	1	23	75
September.....	65	34	1	33	123	55	38	3	70	160	61	14	1	16	91
October.....	60	22	1	27	111	57	24	6	79	163	44	16	4	21	85
November.....	73	21	2	16	112	43	34	5	75	157	25	6	4	8	39
December.....	68	36	1	35	160	53	47	8	74	158	51	20	3	10	84
Totals.....	870	351	26	512	1,774	680	377	50	947	1,804	475	153	29	207	857

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 14—14th and 35th Dist.					Patrol No. 15—15th District.					Patrol No. 16—16th District.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January	59	12	10	24	105	22	11	1	3	37	106	40	5	20	171
February	60	16	9	26	120	30	13	2	4	49	140	45	3	44	232
March	90	23	6	40	159	31	24	2	57	114	175	63	1	76	315
April	80	20	10	28	138	36	20	2	6	64	160	50	1	21	232
May	82	17	4	31	134	39	18	4	3	64	111	44	4	30	189
June	101	15	3	33	157	32	25		2	59	149	33	2	25	209
July	87	20	10	39	156	27	22	4	1	54	142	36	3	35	216
August	95	23	3	33	154	33	22	2	1	63	126	40	1	22	189
September	110	24	5	25	164	30	20	3	1	54	149	40	1	15	205
October	83	20	4	25	132	32	9	1	3	45	110	49	1	30	190
November	72	19	8	15	114	35	25	2	2	64	138	66	1	30	235
December	63	23	8	31	125	25	16	5	2	48	164	84	5	30	293
Totals	991	237	80	355	1,663	377	227	28	85	715	1,670	590	28	378	2,666

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 17—17th District.					Patrol No. 18—18th District.					Patrol No. 19—19th District.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of offenders to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of offenders to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of offenders to and from fires.	Miscellaneous.	Total wagon calls.
January	91	88	1	29	159	67	20	8	78	173	168	16	3	74	261
February	100	88	1	66	255	72	22	7	120	221	173	16	6	85	280
March	150	88	1	73	262	83	31	4	211	329	232	15	1	90	328
April	126	82	2	42	252	100	29	6	118	253	253	20	5	71	349
May	158	83	3	33	227	94	30	3	55	182	219	18	1	60	298
June	150	44	3	31	228	87	27	2	44	160	206	20	2	90	317
July	132	50	1	41	224	101	33	6	55	195	215	20	4	79	318
August	138	50	1	38	227	88	28	5	46	167	225	21	1	73	320
September	135	64	1	36	236	104	30	2	58	194	206	25	3	107	340
October	141	81	1	36	269	80	34	2	62	178	165	12	1	68	246
November	139	33	1	27	200	34	21	3	75	133	124	19	5	45	193
December	110	52	2	28	192	95	30	3	72	200	87	10	5	24	126
Totals	1,570	508	18	480	2,571	1,005	335	51	994	2,385	2,271	212	37	856	3,376

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 20—20th District.					Patrol No. 21—21st and 38th Dists.					Patrol No. 22—22d and 38th Dists.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January	206	73	2	55	336	93	49	4	22	168	20	14	1	11	46
February	200	66	2	91	359	117	47	5	35	204	12	9		14	36
March	229	70	1	73	373	125	59	4	19	207	6	2		19	21
April	200	72	4	45	321	131	61	3	33	228	9	3		17	29
May	217	80	9	66	372	129	45	4	28	206	19	7		14	46
June	212	70	1	70	353	129	42	2	28	201	16	12	2	13	43
July	220	93	1	92	406	176	42	2	36	246	55	18	1	14	83
August	182	60	3	54	306	170	44	2	16	232	56	21	2	20	99
September	215	75	1	85	376	167	56	2	15	240	61	12	2	13	83
October	301	111	6	123	546	132	62	1	21	216	63	11	2	20	96
November	246	93	5	119	483	153	59	4	20	236	40	11	1	13	65
December	333	118	6	92	549	141	46	2	19	203	40	15		14	69
Totals	2,761	990	41	970	4,762	1,633	612	35	282	2,592	327	135	11	131	724

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 23—23d District.					Patrol No. 24—24th District.					Patrol No. 25—25th and 27th Dists.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January	81	38	3	49	171	88	28	2	51	169	103	52	4	85	224
February	70	30	1	103	204	117	38	7	50	212	141	34	3	88	296
March	105	35	1	126	267	148	25	3	37	213	219	69	3	91	392
April	123	27	1	99	250	134	52	3	45	234	162	78	1	64	305
May	141	39	1	90	271	135	42	6	52	235	130	85	5	70	280
June	127	51	1	90	269	87	34	2	45	168	164	90	4	75	333
July	170	53	4	97	324	97	39	12	77	225	164	98	3	76	341
August	145	31	2	56	234	105	31	4	75	215	143	85	2	73	313
September	162	44	1	67	274	101	38	8	78	225	146	66	2	89	303
October	140	32	2	73	247	118	45	4	87	254	142	82		80	304
November	145	33	1	90	269	58	36	2	60	156	134	62	2	81	279
December	153	30	11	95	289	82	46	6	61	195	149	67	3	85	304
Totals	1,562	443	29	1,035	3,069	1,270	454	59	718	2,501	1,792	868	32	942	3,034

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 28—28th District.					Patrol No. 27—27th District.					Patrol No. 28—28th District.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January	35	4	—	—	39	15	10	—	27	52	37	15	7	24	83
February	51	6	—	2	59	14	3	3	80	100	53	16	23	26	118
March	51	8	—	3	62	9	8	1	150	168	86	26	16	19	147
April	51	9	—	4	64	6	11	1	81	99	72	20	8	21	121
May	96	8	—	7	111	23	4	2	41	75	70	25	6	34	135
June	83	3	—	7	73	18	9	3	36	66	84	19	6	22	131
July	86	5	—	5	96	17	9	3	39	68	70	26	7	20	123
August	87	6	—	4	97	23	15	1	36	73	82	20	7	22	131
September	86	3	—	7	76	46	9	4	46	107	67	35	5	19	126
October	82	3	—	7	92	26	13	3	24	66	48	14	10	51	123
November	89	1	—	3	73	17	9	1	24	51	48	21	12	23	109
December	84	3	—	—	87	21	3	9	23	61	81	23	10	11	130
Totals	826	59	—	49	934	245	103	31	612	991	798	265	117	297	1,477

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

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Months.	Patrol No. 29—29th District.					Patrol No. 30—30th and 36th Dists.					Patrol No. 31—31st District.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January.....	64	26	10	97	197	94	20	3	24	141	19	3	2	3	27
February.....	35	5	3	74	117	107	19	3	30	159	16	4	1	5	28
March.....	116	15	6	145	282	83	16	4	98	211	21	2	3	10	38
April.....	100	18	6	130	254	88	26	2	106	222	32	3	1	8	44
May.....	193	22	8	133	356	191	21	2	27	241	39	5	2	9	55
June.....	149	27	3	112	291	113	40	4	31	188	30	7	3	8	48
July.....	164	25	5	129	323	164	33	6	22	225	50	6	4	4	64
August.....	189	39	2	127	357	162	80	4	31	317	39	4	2	16	61
September.....	120	22	4	107	253	134	84	2	39	309	34	3	2	9	48
October.....	144	26	6	127	303	127	20	1	20	168	26	2	1	7	36
November.....	109	25	1	135	251	106	27	—	32	164	26	4	2	10	42
December.....	117	35	8	110	270	113	36	3	30	182	14	8	5	12	39
Totals.....	1,500	285	62	1,407	3,251	1,481	322	34	490	2,327	346	51	28	101	626

Synopsis of Wagon Calls of the Various Patrols During the year 1910—Continued.

Months.	Patrol No. 32—32d District.					Patrol No. 33—33d District.					Patrol No. 34—34th District.				
	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from fires.	Miscellaneous.	Total wagon calls.
January.....	29	18	3	15	65	83	45	3	24	155	57	29	3	18	107
February.....	47	11	1	22	81	80	46		62	188	77	21	2	28	128
March.....	50	27	5	27	109	147	45	3	70	265	97	16	6	29	148
April.....	70	23	3	14	110	101	48	3	44	196	105	18	2	34	189
May.....	30	23		28	81	99	33	4	53	189	129	24	8	32	193
June.....	47	20	2	16	85	113	29	1	68	206	97	24	3	28	182
July.....	44	30	2	15	91	114	39	3	55	211	118	85	2	20	175
August.....	36	8	1	34	79	98	53		49	200	110	85	2	30	177
September.....	67	19	1	6	93	107	43	1	57	208	106	22	2	20	160
October.....	40	17	1	10	68	90	30	1	57	178	108	18	5	19	145
November.....	38	14		17	64	88	33	8	48	172	107	29	3	22	161
December.....	18	26	1	23	68	97	38	3	42	180	131	28	8	16	183
Totals.....	511	286	20	227	984	1,217	482	80	619	2,348	1,237	299	46	296	1,878

Synopsis of Wagon Calls during 1910.

Months.	Conveyance of prisoners.	Conveyance of injured persons.	Conveyance of officers to and from area.	Miscellaneous.	Total wagon calls.
January.....	2,914	1,061	142	1,253	5,370
February.....	3,282	992	126	1,856	6,256
March.....	4,100	1,149	122	2,424	7,795
April.....	4,016	1,170	106	1,781	7,073
May.....	4,285	1,142	111	1,451	6,989
June.....	4,020	1,153	79	1,430	6,682
July.....	4,469	1,318	129	1,448	7,364
August.....	4,351	1,298	77	1,451	7,177
September.....	4,209	1,262	79	1,597	7,147
October.....	3,907	1,114	93	1,650	6,764
November.....	3,601	1,193	119	1,498	6,411
December.....	4,010	1,359	168	1,425	6,962
Totals.....	47,164	14,211	1,351	19,284	81,990

*Summary of Operations of the Fire Alarm Telegraph
during the year 1910*

Months.	First alarms.	Second alarms.	Third alarms.	Fourth alarms.	Fifth alarms.	Sixth alarms.	False alarms.	False alarms pulled by malicious persons.	Totals.
January.....	68	6	3	1				1	74
February.....	70	5	1					4	80
March.....	54	5	1	1	1			6	68
April.....	62	2	2	1			1		67
May.....	56	3	1					2	62
June.....	47	3					1	2	53
July.....	80	3	1						84
August.....	54	1					1	2	58
September.....	36	1	1						38
October.....	50	2	1				1	1	55
November.....	58	4	1	1	1	1	1	1	68
December.....	89	3	1					4	97
Totals.....	719	38	12	4	2	1	5	28	804

Showing the Number of Alarms for each Hour during the year 1910.

Months.	A. M.						P. M.						Total day alarms.	P. M.						A. M.						Total night alarms.	Total
	A. M.						P. M.							P. M.						A. M.							
	6	7	8	9	10	11	12	1	2	3	4	5		6	7	8	9	10	11	12	1	2	3	4	5		
January	1	6	3	3	3	6	5	---	3	5	1	3	39	2	1	8	5	1	3	1	4	2	2	4	2	35	74
February	5	---	3	3	2	7	1	2	6	1	3	5	38	6	4	8	3	4	2	6	4	3	2	---	---	42	80
March	1	---	4	1	3	3	---	3	---	2	3	4	24	3	7	11	6	1	3	5	2	2	1	---	3	44	68
April	---	1	1	2	1	2	3	2	8	1	3	2	20	2	9	3	5	1	3	6	4	3	1	---	4	41	67
May	---	1	6	1	1	1	---	2	4	1	4	3	25	2	4	3	4	1	3	6	4	4	1	2	3	37	62
June	3	2	1	3	1	1	4	3	2	3	2	1	23	2	2	3	2	4	---	2	5	3	1	3	---	27	53
July	1	1	3	2	2	---	6	4	2	4	1	---	36	5	6	4	5	5	3	6	4	7	6	4	3	53	84
August	2	---	1	3	1	---	2	1	3	1	---	---	14	5	3	5	3	2	3	5	3	3	6	5	2	44	53
September	---	1	2	1	1	2	1	---	1	1	6	1	17	2	2	1	2	3	2	---	1	3	1	4	---	21	38
October	2	---	1	1	3	5	1	1	1	3	1	---	29	4	1	5	4	3	3	3	4	3	1	4	---	35	55
November	2	---	1	1	2	2	2	2	5	1	7	1	26	3	5	2	5	5	2	3	5	2	2	2	1	42	68
December	---	2	4	3	4	3	6	3	8	---	4	6	43	2	3	5	9	6	6	4	3	5	4	---	2	54	97
Totals	18	19	25	24	24	32	31	23	43	21	37	27	394	43	47	58	53	36	32	47	48	40	28	20	---	480	804

Showing the Number of Alarms from each Box during 1910.

Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.
5	1	84	1	231	8	847	1	458	1	548	1	691	2
7	2	85	1	232	1	849	2	461	1	547	2	693	1
9	1	86	1	233	1	854	1	462	2	554	1	694	2
12	7	89	1	234	1	858	1	463	1	556	1	699	1
13	1	91	2	236	1	861	3	465	2	558	1	713	1
14	1	92	2	237	2	862	8	468	1	559	4	716	1
15	2	93	3	239	1	863	1	469	2	562	1	722	1
18	1	121	1	242	1	871	1	471	2	563	8	724	1
19	1	122	1	243	1	873	2	474	2	571	2	729	2
21	1	124	2	246	1	874	1	477	1	578	1	735	1
23	2	128	1	251	1	875	1	479	2	575	2	736	1
24	1	129	1	252	1	881	1	482	1	579	1	741	1
25	1	131	6	254	2	882	2	483	3	581	1	754	2
26	1	136	1	259	3	883	3	485	1	583	1	756	1
27	3	141	2	261	1	886	1	492	2	585	1	757	1
28	1	144	1	264	2	887	2	495	1	586	1	758	2
29	3	145	1	265	1	891	1	496	3	596	1	761	1
35	5	153	1	266	1	892	1	498	2	618	3	765	3
36	4	156	1	272	1	893	1	499	1	623	2	767	1
37	2	167	1	277	2	897	3	513	1	637	1	769	1
39	4	171	2	283	1	898	2	514	2	646	2	772	1
41	1	173	1	284	5	412	1	515	1	649	1	775	3
42	1	175	1	292	1	413	1	516	1	656	2	779	6
43	4	176	4	294	2	417	1	519	1	657	1	781	1
46	1	179	1	297	1	418	1	521	3	658	1	785	2
48	2	183	1	299	1	419	2	523	1	661	1	787	1
52	3	185	3	312	1	421	1	525	1	664	2	791	1
53	2	187	2	317	1	424	1	531	2	665	1	794	2
54	1	191	1	318	1	427	2	532	1	667	1	799	1
56	2	215	1	319	1	429	3	535	2	668	1	815	1
57	1	218	1	321	1	431	2	536	2	669	3	816	1
58	1	221	1	325	1	433	1	537	4	676	2	819	2
69	1	223	1	326	2	434	2	539	1	677	1	822	2
73	2	224	1	331	3	442	5	541	1	678	1	829	1
76	1	225	2	342	1	443	1	542	2	681	3	833	1
82	2	227	1	343	1	449	2	543	1	686	1	844	1
83	4	228	2	344	2	452	1	545	5	689	1	847	2

Showing the Number of Alarms, etc.—Continued.

Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.	Box.	Alarms.
856	1	998	2	1412	2	1588	1	1787	2	2287	1	2547	1
862	1	1214	8	1418	2	1589	1	1788	1	2241	1	2556	1
868	1	1215	2	1415	1	1541	1	1827	2	2249	1	2578	1
869	2	1217	1	1416	1	1553	2	1882	1	2251	1	2581	1
875	1	1226	1	1417	1	1554	1	1844	1	2256	1	2585	1
876	1	1228	4	1418	1	1557	1	1851	1	2257	1	2594	1
879	1	1229	1	1419	1	1558	1	1858	1	2264	1	2622	1
883	1	1231	1	1421	2	1559	1	1861	2	2272	1	2624	1
885	1	1232	2	1422	1	1579	1	1865	2	2277	2	2634	1
889	2	1243	1	1423	1	1586	1	1874	1	2281	1	2637	1
892	1	1244	2	1424	8	1588	1	1912	1	2282	1	2638	1
898	4	1251	1	1425	2	1591	1	1913	1	2284	2	2643	2
912	1	1256	1	1426	2	1592	2	1917	2	2285	1	2645	1
913	1	1266	7	1431	2	1594	1	1922	1	2238	3	2668	1
914	6	1267	4	1433	2	1596	2	1923	1	2291	3	2669	1
917	1	1287	1	1434	1	1597	2	1929	1	2355	1	2678	1
918	1	1299	1	1439	1	1599	2	1935	1	2356	1	2685	1
921	3	1291	1	1446	1	1617	1	1937	1	2365	2	2696	2
922	1	1296	1	1448	3	1621	2	1945	2	2366	1	2712	1
926	1	1299	1	1449	2	1622	1	1952	4	2382	1	2735	1
935	1	1312	2	1453	1	1625	1	1957	6	2384	2	2742	1
938	2	1315	1	1454	2	1628	1	1965	1	2391	1	3118	1
939	1	1319	1	1456	4	1652	2	1967	1	2398	1	3135	1
941	1	1321	1	1458	1	1654	1	1974	1	2399	2	3139	1
944	1	1323	2	1459	1	1657	1	2116	1	2414	1	3143	1
946	1	1331	1	1463	1	1677	1	2127	1	2419	1	3154	1
951	1	1339	2	1467	1	1686	1	2133	1	2434	1	3164	1
956	1	1363	2	1476	1	1725	1	2134	1	2437	2	3168	1
967	2	1375	1	1478	1	1751	1	2135	3	2454	2	3174	1
958	1	1376	1	1483	2	1752	2	2153	2	2475	1	3192	2
964	1	1379	1	1486	1	1755	1	2158	2	2485	1	3214	1
968	2	1387	1	1491	1	1756	3	2164	3	2487	1	3252	1
969	1	1388	1	1494	1	1759	1	2183	2	2512	1	3256	2
971	3	1391	1	1512	1	1761	1	2185	1	2513	2	3268	1
972	1	1392	1	1517	1	1765	2	2217	1	2519	3	3275	1
974	1	1394	1	1518	1	1767	1	2218	11	2526	3	3285	1
981	1	1398	1	1525	1	1771	1	2231	2	2538	1	3291	1
987	1	1399	2	1531	2	1778	1	2232	1	2539	1		

*Showing the Number of Permits Issued to each Company and the Purpose for which Granted,
during the Year 1910.*

	Overhead.						Underground.			
	Wires.			Poles.			Approval.			
	Burning of new.	Repairs to and renewal of.	Removal.	Transfer and erection of lamps.	Erection of.	Renewal of.	Removal of.	New work.	To make service connections.	Repairs.
American District Telegraph Company.....	19	13	19			1	3			
American Telephone and Telegraph Company.....		3				1				3
Atlantic Refining Company.....		1								
Bell Telephone Company of Pennsylvania.....	6,076	200	7		84	23	16	564		75
Harrison Brothers & Company.....		8				1				
Holmesburg, Tacony and Frankford Railway.....		1				1				
Holmes Electric Protective Company.....	13	1	1							
Keystone Telephone Company.....	43	1			29	20		36		15
Mutual Union Telegraph Company.....	1		2			8	1			
New York News Bureau.....	19	2								
Pennsylvania Railroad Company.....	4	3					1			
Totals.....										

Showing the Numbers of Permits Issued to each Company, etc.—Continued.

	Overhead.						Approval.			Totals.	
	Wires.			Poles.			Underground.				
	Running of new.	Repairs to and renewal of.	Removal.	Transfer and erection of lamps.	Erection of.	Renewal of.	Removal of.	New work.	To make service connections.		Repairs.
Philadelphia and Reading Railway Company.....	6	4				1	1				12
Philadelphia Electric Company.....	8,300	255	1,121	2,066	1,895	1,456	89		422	269	10,463
Philadelphia Local Telegraph Company.....	25	17									43
Philadelphia Rapid Transit Company.....	8	20			3	2				15	43
Pneumatic Fire Alarm Telegraph Company.....	2	4	1								7
Postal Telegraph Cable Company.....	14	7	8				1				30
Roxborough, Chestnut Hill and Norristown Ry. Co.....		3									3
United Gas Improvement Company.....		1			3						4
Western Union Telegraph Company.....	48	19	3			12	2				84
Totals.....	9,664	568	1,162	2,066	1,614	1,521	114	630	422	377	18,018

Number of Electric Lights Authorized in Each Ward, Together With the Number of Free Lights, December 31, 1909.

Wards.	Number of lights overhead.	Underground.		Total.	Grand total.
		On City cables.	On other cables.		
First	188	8		196	
Second	188	22	11	221	
Third	164	34	1	199	
Fourth	158	3	1	162	
Fifth	66		190	256	
Sixth	66	10	253	329	
Seventh	144	12	145	301	
Eighth	82	35	314	431	
Ninth	102	46	328	476	
Tenth	84	14	189	287	
Eleventh	128	16	4	148	
Twelfth	140		8	148	
Thirteenth	144	15	7	166	
Fourteenth	186	49	9	244	
Fifteenth	218	184	34	386	
Sixteenth	156	8	12	176	
Seventeenth	144	9	16	169	
Eighteenth	318		1	319	
Nineteenth	478	35		513	
Twentieth	381	18	40	439	
Twenty-first	310			310	
Twenty-second	419			419	
Twenty-third	335			335	
Twenty-fourth	374	30	4	408	
Twenty-fifth	200			200	
Twenty-sixth	276	70	6	352	
Twenty-seventh	242		18	260	

Number of Electric Lights—Continued.

Wards.	Number of lights overhead.	Underground.		Total.	Grand total.
		On City cables.	On other cables.		
Twenty-eighth.....	237		2	239	
Twenty-ninth.....	77	54	49	180	
Thirtieth.....	245	42		287	
Thirty-first.....	351			351	
Thirty-second.....	284	57	11	352	
Thirty-third.....	203		3	206	
Thirty-fourth.....	391		1	392	
Thirty-fifth.....	315		2	317	
Thirty-sixth.....	296	21	6	322	
Thirty-seventh.....	196	18	12	226	
Thirty-eighth.....	277	21		298	
Thirty-ninth.....	229	14	15	258	
Fortieth.....	238			238	
Forty-first.....	305			305	
Forty-second.....	172			172	
Forty-third.....	173		4	177	
Forty-fourth.....	164			164	
Forty-fifth.....	166			166	
Forty-sixth.....	227			227	
Forty-seventh.....	231			231	
Gray's Ferry Bridge.....			12	12	
Callowhill Street Bridge.....	13			13	
Market Street Bridge.....		4		4	
Chestnut Street Bridge.....	4			4	
Walnut Street Bridge.....		21		21	
Girard Avenue Bridge.....			4	4	
South Street Bridge.....	12			12	
Falls of Schuylkill Bridge.....	7			7	
Penrose Ferry Bridge.....	6			6	

Number of Electric Lights—Continued.

Wards.	Number of lights overhead.	Underground.		Total.	Grand total.
		On City cables.	On other cables.		
Walnut Lane Bridge.....	2		6	8	
Forty-second Street Bridge.....	4			4	
Chestnut Street Pier.....		19		19	
Arch Street Pier.....	3			3	
Race Street Pier.....		17		17	
Totals.....	10,518	856	1,715		13,082
GIRARD ESTATE LIGHTS.					
Front street, from Vine to South street.....			24	24	
Delaware ave., from Vine to South street.....			39	39	
Piers and miscellaneous.....			24	24	
Total Girard Estate lights.....			86		86
FREE LIGHTS.					
Cheltenham Elec. Light and Power Co.....	5			5	
Diamond Electric Company.....	9		1	10	
Germantown Electric Light Company.....	5			5	
Manufacturers' Electric Company.....	23	1		24	
Northern Electric Light and Power Co.....	9		1	10	
Powelton Electric Company.....	10			10	
Southern Electric Light and Power Co.....	10			10	
Suburban Electric Company.....	5			5	
West End Electric Company.....	15			15	
Kensington Electric Company.....	10			10	
Peoples' Trac. Co. (Girard ave. Bridge).....			3	3	
Total free lights.....	101	1	5		107
Grand total.....					13,285

Number of Miles of Overhead and Underground Wires.

Overhead wires.	Mileage of wire on City poles.	Mileage of wire on other poles.	Mileage of wire on fixtures and build- ings.	Total.
American District Telegraph Company	6.58	4.08	165.90	176.56
American Telegraph and Telephone Co	-----	442.12	4.50	446.62
Atlantic Refining Company	4.50	9.50	1.00	15.00
Auxiliary Fire Alarm Co. of Philad'a	1.56	.94	.51	8.01
Bell Telephone Company	-----	1,291.27	2,080.88	3,322.15
Girard Point Storage Company	5.00	-----	-----	5.00
Harrison Brothers & Company	2.50	2.00	-----	4.50
Holmesburg, Tacony and Frankford Electric Railway Company	-----	50.55	-----	50.55
Holmes Electric Protective Company	-----	-----	25.30	25.30
Keystone Telephone Company	67.50	705.16	163.00	935.66
New York News Bureau	12.60	97.50	4.30	114.40
Pennsylvania Railroad Company	8.63	43.90	.81	48.34
Philadelphia Electric Company	434.30	4,130.50	-----	4,564.80
Philadelphia Rapid Transit Company	-----	638.30	-----	638.30
Philadelphia, Reading and Pottsville Telegraph Company	.27	7.60	.18	8.05
Philadelphia Local Telegraph Co	12.69	43.91	210.47	267.07
Pneumatic Fire Alarm Telegraph Co	1.19	.13	20.00	21.32
Postal Telegraph Cable Company	.40	143.48	192.92	336.80
Roxborough, Chestnut Hill and Nor- ristown Railway Company	-----	50.20	-----	50.20
Southwestern Street Railway Co	-----	25.25	-----	25.25
United Gas Improvement Company	15.25	3.50	-----	18.75
Western Union Telegraph Company	20.20	1,745.51	106.80	1,872.51
Totals	588.17	9,435.40	2,926.57	12,960.14
City wires	-----	-----	-----	1,881.00
Total overhead wires	-----	-----	-----	14,881.14

Number of Miles of Overhead and Underground Wires.

Underground wires.	Electric light and power wires.	Telephone and telegraph wires.	Total.	Grand total.
American Telegraph and Telephone Company.....		4,747.00	4,747.00	
Bell Telephone Company.....		348,170.17	348,170.17	
Edison Electric Light Company.....	187.07		187.07	
Girard Estate	16.06		16.06	
Holmes Electric Protective Company.....		325.12	325.12	
Keystone Telephone Company.....		89,639.06	89,639.06	
New York News Bureau.....		17.10	17.10	
Pennsylvania Railroad Company.....		123.78	123.78	
Philadelphia Electric Company.....	653.50		653.50	
Philadelphia Rapid Transit Co.....	1,026.89		1,026.89	
Philadelphia, Reading and Pottsville Telegraph Company		8.36	8.36	
Pneumatic Fire Alarm Telegraph Co.		21.13	21.13	
Postal Telegraph Cable Company.....		500.90	500.90	
Western Union Telegraph Company.....		2,717.44	2,717.44	
City	53.27	4,502.62	4,555.89	
Total underground wires.....	1,836.79	450,772.68	452,709.47	
Total overhead and underground wires.....				467,540.61

Summary of Underground Conduits.

	Length in feet of conduit.	Length in feet of duct.	Miles of duct.
American Telegraph and Telephone Company.	264,136	1,940,884	367.59
Bell Telephone Company-----	2,792,706	11,004,961	2,084.27
Girard Estate -----	30,179	163,957	31.05
Keystone Telephone Company-----	1,563,516	11,915,388	2,256.70
Pennsylvania Railroad Company-----	423	3,210	.60
Philadelphia, Reading and Pottsville Tele- graph Company -----	1,301	3,471	.65
Philadelphia Rapid Transit Company-----	1,260,118	20,898,984	3,958.14
Philadelphia Electric Company-----	535,709	688,865	130.46
Pneumatic Transit Company-----	99,184	304,715	57.71
City -----	502,044	3,655,686	692.36
Total-----	7,049,316	50,580,121	9,579.53

Return of License Charges Paid by the Various Companies for Attachments to City Poles, Maintenance of Poles, Erection of Poles, and the Mileage of Wire Overhead for the year 1910.

	Attachments.	Maintenance of poles.	Erection of poles.	Wires on City poles.	Wires on other poles and buildings.	Total.
American District Telegraph Company-----	\$79 00	-----	-----	\$20 00	\$537 50	\$636 50
American Telegraph and Telephone Company-----	-----	\$97 00	-----	-----	1,155 00	1,252 00
AJantic and Pacific Telegraph Company-----	-----	297 00	-----	-----	335 00	602 00
Atlantic Refining Company-----	61 00	5 00	-----	12 50	27 50	106 00
Bell Telephone Company-----	-----	5,952 00	\$1,015 00	20,732 50	-----	27,699 50
Gitard Point Storage Company-----	9 00	-----	-----	12 50	-----	21 50
Harrison Brothers & Company-----	53 00	44 00	-----	7 50	5 00	106 50
Holmes Electric Protective Company-----	-----	-----	-----	-----	65 00	65 00
Keystone Telephone Company-----	1,039 50	2,596 00	230 00	140 00	2,112 50	6,108 00
Mutual Union Telegraph Company-----	-----	323 00	-----	-----	915 00	1,238 00
Pennsylvania Railroad Company-----	68 00	89 00	-----	12 50	112 50	282 00
Philadelphia Electric Company-----	9,172 00	25,768 00	8,775 00	2,135 00	17,640 00	63,490 00

Return of License Charges for Attachments to City Poles—Continued.

	Attachments.	Maintenance of poles.	Erection of poles.	Wires on City poles.	Wires on other poles and buildings.	Total.
Philadelphia Local Telegraph Company-----	\$448 00	\$116 00	-----	\$67 50	\$372 50	\$1,004 00
Philadelphia, Reading and Pottsville Telegraph Company-----	12 00	56 00	-----	2 50	20 00	90 50
Pneumatic Fire Alarm Telegraph Company-----	30 00	-----	-----	5 00	50 00	85 00
Postal Telegraph Cable Company-----	32 50	220 00	-----	2 50	845 00	1,100 00
United Gas Improvement Company-----	273 00	19 00	-----	40 00	15 00	347 00
Western Union Telegraph Company-----	96 50	1,479 00	-----	37 50	3,115 00	4,728 00
Total-----	\$11,303 50	\$37,021 50	\$10,020 00	\$23,227 50	\$27,322 50	\$108,954 50

